

TRANSPORTATION POLICY COMMITTEE WORKSHOP
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)	
)	
Fuel Efficient Tire Program)	Docket No.
(AB 844, Statutes of 2003))	07-FET-1
)	
_____)	

CALIFORNIA ENERGY COMMISSION
HEARING ROOM A
1516 NINTH STREET
SACRAMENTO, CALIFORNIA

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10:00 A.M.

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COMMISSIONERS PRESENT

James D. Boyd, Presiding Member

ADVISORS PRESENT

Susan Brown

Laurie ten Hope

Peter Ward

STAFF PRESENT

Asish Gutam

Caryn Holmes

Tim Olson

Rosella Shapiro

Ray Tuvell

ALSO PRESENT

Marion G. Pottinger, PhD, M'gineering (via
telephone)

Robert F. Sawyer, PhD, University of California,
Berkeley

Alan Meier, PhD, Lawrence Berkeley National
Laboratory

Jim Popio, PhD, Smithers Scientific Services, Inc.
(via telephone)

Bruce Lambillotte, Smithers Scientific Services,
Inc. (via telephone)

Michael Wischhusen, Michelin North America, Inc.

Tracey Norberg, Rubber Manufacturers Association

Luke Tonachel, National Resources Defense Council

Terry Leveille, California Tire Dealers
Association

Donald D. Amos, Continental Tire North America,
Inc.

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P R O C E E D I N G S

10:09 a.m.

PRESIDING MEMBER BOYD: Good morning, everybody. I'm sorry to be a tad late getting this started. I'm Jim Boyd, Vice Chair of the Commission but Chair of the Transportation Committee, which is why you have me here today.

This is, as you have all seen from the hearing notice, a workshop. I just wish the way this room was set up it was set up in a little more informal, friendly fashion or that we could automatically crank this dais down to the same level as the rest of you. But I invite you to recognize that this is a workshop, it is not a formal business meeting of the Commission, and that we would like to have as much exchange as we possibly can. So this is a Committee Workshop on the Fuel Efficient Tire Program.

The Transportation Committee, which consists of myself and Commissioner Jeff Byron, is overseeing this project and is getting itself more involved in this project now that we have dispensed with so many other incredibly complex and pressing topics of late such as an Alternative Fuels Plan or an Integrated Energy Policy Report

1 and what have you. So I'm hoping we can get this
2 back on track.

3 Commissioner Byron was unable at the
4 last minute to be here with us today. He is on
5 business in I believe the Bay Area. With me up
6 here at the dais, however, is his principal
7 advisor, Laurie Ten Hope, who will be sitting in
8 for him. And to my right, Susan Brown, my
9 principal advisor, and Peter Ward, my other
10 advisor. You'll be meeting many of the staff
11 throughout the course of the day.

12 This is a project that is important to
13 us, contrary to popular belief maybe at this late
14 date and time. It is particularly important
15 because the first report done by this agency
16 pointed out that there was potential here and the
17 Legislature chose to pursue and direct us to
18 pursue this subject even more.

19 I won't go through all the horror
20 stories of why this might be a little bit behind
21 schedule. The incredible amount of staff turnover
22 we have had here in terms of people who were the
23 project managers. It got so important to us in
24 the immediate past that our Executive Director
25 took personal charge of this project and now he

1 has left us.

2 So Mr. Tuvell, who will get the mic here
3 in the moment, has not-too-long ago been given the
4 program manager responsibility for this and all of
5 us are going to be more deeply involved in seeing
6 that this project moves along.

7 As I started to say, it is particularly
8 important just because this agency with its quest
9 for addressing transportation fuels has pointed
10 out efficiency is one of the strong legs of the
11 stool, alternative fuels, technology, efficiency,
12 land use and transportation, et cetera. We need
13 to address all of those to meet our energy
14 security, energy diversity needs.

15 But the greatest driver all has become
16 climate change and this issue is a component of
17 the state's climate action team program. We need
18 to move this issue along so it makes its
19 contribution to that effort.

20 And of course always of concern in this
21 state for decades is the subject of air quality,
22 which has always been the major driver for why we
23 want efficiency, less fossil fuel combustion, et
24 cetera, et cetera. So we have lots of forcing
25 functions that we need to address.

1 With that I will just say again that
2 this is workshop. We want to see where we are
3 today and then move this issue along. I have been
4 asked questions of late, as I am sure the staff
5 has, is what is our timetable moving forward from
6 this point? And my response to that has been, I
7 think that timetable will be developed immediately
8 upon finishing today's discussion. We need to
9 ascertain where we are, where you all are, where
10 this general subject is in order to determine our
11 timetable for the future.

12 All I will say is recognizing that we're
13 behind schedule we obviously are putting the
14 staff's feet to the fire and our feet to the fire
15 and want to move this along rapidly, but
16 accurately. Therefore a lot has changed as far as
17 I'm concerned since I last visited this subject
18 some time ago.

19 I would like to think that the passage
20 of time, which has contributed to the view that
21 perhaps there has been some slippage, has also
22 contributed to moving the ball in this arena way
23 down the field. A lot of events have occurred
24 that may well contribute to our completing this
25 project in a very timely manner and completing it

1 without maybe stumbling over some of the issues
2 that had been identified in the past as issues.

3 As I say, the ever-accelerating pace of
4 the world and everything we work on, I think has
5 lined up some issues in a way that will allow us
6 to have a very cooperative, effective relationship
7 with all the stakeholders and all the agencies who
8 are involved in this project.

9 So enough said. I would like to again
10 thank all of you for being here. I would like to
11 remind you again this is a workshop. Although we
12 are recording it to create a record that we can
13 reference to, and even though I say I'd like this
14 to be informal, coats off, sleeves rolled up --
15 the room is probably too cold for coats off.
16 Please feel free to ask a question or inject some
17 comment throughout the course of the day.

18 But recognize you'll have to dash up to
19 the podium where the microphone sits or come to
20 the table even when making presentations and give
21 us your name for the record so the record so
22 reflects and the microphone so the recording will
23 pick up the comments you make.

24 With that I am going to turn the
25 microphone over to Ray Tuvell who is the staff

1 member -- who is the project manager for this
2 project now and ask Ray to give his introduction.
3 Frankly, Ray will act as master of ceremonies for
4 the balance of the day.

5 MR. TUVELL: Thank you, Commissioner
6 Boyd. I have a little bit of housekeeping that we
7 have to deal with, formalities.

8 For those of you who are not familiar
9 with the building the closest restrooms are
10 located right outside the door over that
11 direction. There is a snack bar on the second
12 floor up here. And lastly, in the event of an
13 emergency and the building is evacuated you can
14 follow the rest of us employees. We'll end up
15 convening across the street over in Roosevelt
16 Park.

17 PRESIDING MEMBER BOYD: Be grateful it's
18 not raining today.

19 MR. TUVELL: Grab your jackets and
20 umbrellas if need be and then we'll head over
21 there. We're not expecting any emergencies.

22 We have a fairly ambitious agenda today
23 and I want to ask for your patience. In some
24 cases we are going to have remote speakers that
25 are not going to be present in the room and so we

1 may have to deal with some transitional related
2 problems that might take just a few extra minutes
3 and so I appreciate your patience as we move
4 forward.

5 As Jim indicated we certainly want to
6 welcome questions and comments as we proceed. But
7 I know in some cases there are some people who do
8 have actual presentations that they wanted to make
9 that aren't currently on the agenda. And we
10 simply ask that you fill out the blue cards that
11 were out at the main desk and give that to us and
12 then, of course, we'll certainly provide you the
13 opportunity to make your presentations. Okay?

14 Let's see here. My intention then is to
15 launch straight into the individual presentations
16 so bear with me here.

17 Our first presenter is Dr. Marion
18 Pottinger who is the owner of M'gineering. He is
19 in a consulting practice devoted to concepts of
20 machines, mechanics and particular application to
21 tires and tire vehicle systems.

22 Prior to his formal retirement in 2003
23 Dr. Pottinger was technical director of Smithers
24 Scientific Services Inc. Marion has worked on
25 numerous diverse projects in both technical and

1 managerial positions.

2 Since leaving the Air Force in 1969 he
3 has concentrated in the areas of tire and vehicle
4 mechanics. Dr. Pottinger has worked for Goodrich
5 and Uniroyal. He has published more than 40
6 papers, acquired five patents, acted as office
7 reporter for over a dozen SAE-J documents, ten in
8 the last three years, contributed to books and
9 given numerous lectures, including the plenary
10 lecture at the Tire Society in 1997.

11 Dr. Pottinger acquired his MS and PhD
12 degree from Purdue University and BS in mechanical
13 engineering from the University of Cincinnati.

14 He is President Emeritus of the Tire
15 Society. He has been particularly active in SAE
16 and ASTM, two of the five technical societies of
17 which he is a member. He is also a registered
18 professional engineer and a member of the society
19 Sigma Chi.

20 Marion currently resides in Akron where
21 he is going to be giving the presentation from
22 today. Are you there, Marion?

23 DR. POTTINGER: Yes I am. We have the
24 problem again that I do not have the presentation
25 in terms of having control of it. Should I log

1 off and log on again like we did yesterday?

2 MR. TUVELL: Hold on, Marion, and bear
3 with us as we try to go through this. Marion, go
4 ahead and give it a try. Use your arrow keys and
5 see if you've got control now.

6 DR. POTTINGER: No.

7 MR. TUVELL: Okay. Well what I'm going
8 to do then is I'll go ahead and take control from
9 here and then you can prompt me.

10 DR. POTTINGER: Okay.

11 MR. TUVELL: Okay. So we're on the
12 first page, Marion, so go right ahead.

13 DR. POTTINGER: Okay. I do not see the
14 slides so you'll have to excuse me.

15 MR. TUVELL: Okay.

16 DR. POTTINGER: Okay. The National Tire
17 Efficiency Study Report was issued August 4, 2006.
18 That was a year to the day after the project
19 began. Next slide.

20 MR. TUVELL: Okay.

21 DR. POTTINGER: Congress gave us the
22 following charge: To evaluate effects of lowering
23 rolling resistance of replacement passenger times.
24 And the idea was to look at the effects on vehicle
25 fuel consumption, tire wear and scrap tire

1 generation, tire performance characteristics and
2 highway safety, consumer spending on tires and
3 fuel. The funding was through the National
4 Highway Traffic Safety Administration. The
5 Committee's work was restricted to passenger
6 tires, which are used on all but the heaviest
7 light trucks. Next slide.

8 Basically we're going to talk about fuel
9 energy utilization in driving, tire energy usage,
10 Committee conclusions, Committee recommendations,
11 and then a few personal comments that I'll blame
12 on myself.

13 In among all of this the authors have
14 interspersed some data, which will indicate why
15 the Committee concluded what it did and
16 recommended what it did. Occasionally if we did
17 insert a personal opinion well will identify it
18 our's and not the Committee's. There is a great
19 deal more information presented in the printed
20 paper than we could cover in this presentation and
21 it has appeared in Tire Science and Technology.
22 Next slide.

23 The first slide, where energy goes,
24 deals with urban driving. And if you look at this
25 chart there's lots of boxes and arrows. But they

1 are representative of the auguration of a mid-size
2 gasoline-fueled automobile.

3 The chart is for urban driving. Only 13
4 percent of the fuel energy value does actual work
5 to move the vehicle forward. And of that 13
6 percent, in an urban environment, half is lost in
7 repeated stopping. We're going to be looking at
8 what can be done by reducing losses in the rolling
9 part of the equation.

10 For your interest, hybrids attain their
11 in-town fuel economy advantage by reducing the
12 part of the standby where you're idling in traffic
13 and by reclaiming some of the braking energy
14 dissipation. Next slide.

15 Turning now to highway driving, the
16 situation is better. About 20 percent of the fuel
17 energy actually ends up doing work to move the
18 vehicle down the highway. Braking and standby or
19 idling are greatly reduced. Thus, down the
20 highway a hybrid doesn't show a large fuel economy
21 advantage beyond that granted by use of a smaller
22 engine. The Committee looked at what can be done
23 by reducing the seven percent lost in rolling.
24 Next slide.

25 When we characterize tire energy usage

1 we come up with the rolling resistance force. And
2 this is obtained by dividing the power by the
3 velocity at which you're traveling and it gives an
4 equivalent force.

5 And the measurements to determine this
6 are primarily made in the United States on 1.7
7 meter diameter dynamometers. And they use
8 primarily two tests here in this country. The
9 first is SAE J-1269, the second is J-2452, and
10 this depends on the method used for the data.

11 The rolling resistance coefficient,
12 which is a way to try to get this all down to some
13 single number, depends on inflation pressure and
14 load for operating conditions prevailing in the
15 United States. Velocity isn't important until you
16 exceed allowable highway speeds.

17 Thus a valid comparison of rolling
18 resistance for different tires can probably be
19 obtained by determining the rolling resistance
20 coefficient as a standardized condition. I would
21 emphasize that it is not for sure that we know how
22 to do this. The rolling resistance coefficient
23 was used in the analysis in back of the
24 Committee's conclusions. Next slide.

25 Reducing rolling resistance of

1 replacement tires in the fleet by ten percent is
2 feasible. And this would be true about any great
3 technical stride. If consumers accept that
4 rolling existence is truly important more
5 reduction is reasonably achievable. Next slide.

6 This can really be done by changing the
7 mix of existing tires purchased. Many replacement
8 tires have low rolling resistance relative to the
9 average of replacement tires. Next slide.

10 The graph you see shows the rolling
11 resistance coefficient as a function of rim
12 diameter. This is a representation for a
13 significant number of replacement tires, all of a
14 uniform tire quality grading, traction rating of
15 A. The rolling resistance coefficient on the
16 ordinant are for many different tires being sold
17 in United States right now, actually as of two
18 years ago.

19 In rim diameters, where many sizes are
20 available, it wouldn't be hard to choose tires
21 with ten percent lower rolling resistance without
22 hurting traction because you have the same
23 traction grade, assuming that this is an adequate
24 measure of traction. For large rim diameters, 18
25 inches and above, these are new on the market and

1 relatively rare at this time. Next slide.

2 Migration of OE technologies could help.
3 Now this is where silica and xylene have usually
4 been found to date, although other technologies
5 are involved. OE tires typically have lower road
6 resistance by 10 to 25 percent across all classes
7 of tires. Next slide.

8 We added some bands to that graph we saw
9 just a moment ago. And if you look at these bands
10 you see the performance tires, H rated and above,
11 have about the same band as light truck, P-metric
12 tires in terms of OE tires.

13 Finally, except for Z, W and so-forth
14 tires, that arrow going up on the right side of
15 the graph, which are quite rare, proper OE
16 technology could be applied to result in a
17 substantial reduction in rolling resistance. Next
18 slide.

19 If we all watched our inflation pressure
20 we could reduce our operating rolling resistance
21 by an average of about five percent right now.
22 Now this can be difficult because there is a
23 temperature interaction. And as I pointed out to
24 the fellows the other day, I did my tires last
25 week when it was 60 here and it's 20 here right

1 now so that makes a big difference. But it is a
2 cheap way to reduce rolling resistance, it's
3 immediate, but as drivers we're often careless.

4 I'm going to tell you a small but quick
5 story. One of the technical directors of one of
6 the tire companies bought a new car in 2006. He'd
7 had it about three months when he noticed a light
8 come on on the dash. He didn't realize he had a
9 tire pressure monitoring system to that point. So
10 you can think about that.

11 In our opinion, the right tire choices
12 and good inflation maintenance should really
13 produce 15 percent or more reduction. Good
14 inflation maintenance is good just generally. It
15 increases wear life, improves handling and reduces
16 the already slim chance of a tire failure, besides
17 reducing fuel usage. Next slide.

18 A ten percent reduction in rolling
19 resistance will improve fuel economy by one to two
20 percent. Next slide.

21 To check this we went to a base rolling
22 resistance coefficient tire that was .008. This
23 is good. It's a good tire in terms of rolling
24 resistance. And we asked General Motors, that's
25 GM, the National Energy Technology Laboratory,

1 Professor Mark Ross at the University of Michigan
2 and Environmental Energy Analysis Incorporated to
3 model what would happen for reducing the rolling
4 resistance coefficient by ten percent and then for
5 increasing it by about ten percent. And all of
6 them happened to agree that ten percent would be
7 one to two percent of the fuel used. Next slide.

8 Eighty percent of passenger vehicles now
9 have replacement tires. A one percent improvement
10 in fuel economy in these vehicles would save about
11 a billion gallons, that's about almost 24 million
12 barrels of fuel annually. And the ten percent
13 would be like the effect of cutting the number of
14 cars and light trucks on the road by about two to
15 four million vehicles. Fundamentally what this
16 all says is one to two percent of big numbers
17 matter on a national scale. Or you might say, a
18 California scale. Next slide.

19 You all recognize that reducing tire
20 mass is and the compounds throughout the tires
21 will reduce rolling resistance. But changing the
22 carcass, which is the structural part of the tire,
23 is more complicated than changing the tread.
24 Since about half the tire's rolling resistance is
25 tread related the Committee viewed the first order

1 of changes as tread-related.

2 The details of the tread compound and
3 how much of it are present affect rolling
4 resistance. Less wear reduces rolling resistance
5 over a tire's life by an average of about 20
6 percent. It is promising as all of you also know
7 to improve compounds reduces resistance. Many
8 details of compound improvement technology are
9 held proprietary by different tire companies. And
10 of course not all of these technologies are silica
11 and xylene-based.

12 Building tires to a smaller tread mass
13 will reduce rolling resistance but not by much
14 over the tire's life unless drastic changes are
15 made such as half tread depth tires with multiple
16 retread. Thus we concluded that simply reducing
17 tread depth enough to look good in a new tire
18 rolling resistance measurement is a bad idea.

19 But suppose you did it in our current,
20 industrial model. This would lead to the fact
21 that every one percent reduction in tread life
22 would add about \$1.20 in tire cost per year for
23 tire purchasers like you and me. The amount of
24 scrap tires would climb. Next slide.

25 Traction is changed every day to some

1 extent every day for reasons of noise mitigation,
2 appearance, handling, ride comfort and on and on,
3 not just rolling resistance. And the Committee
4 really had no way to identify the small changes in
5 traction and their relationship to safety. Indeed
6 there may not be any relationship for small
7 changes to traction.

8 We looked at the uniform tire quality
9 grading traction to see if it was feasible to
10 reduce rolling resistance while maintaining
11 traction. Again, we're assuming that this is an
12 adequate measure although it's a very simplified
13 test and deals with only one condition. Next
14 slide.

15 Here you have the rolling resistance
16 coefficient for a number of tires at each of the
17 traction grades. Tires graded A or AA reveal an
18 ample amount of choice of rolling resistance
19 without changing traction level. As a customer we
20 have a choice if we have data. The B level, which
21 contains relatively few tires, harbors tires which
22 are lowest in rolling resistance. Next slide.

23 Reducing the average rolling resistance
24 for replacement tires does promise net savings to
25 customers. A one to two percent savings in fuel

1 would be \$18 to \$36 per year in average fuel
2 savings, \$3 to \$6 billion annually. And the
3 numbers were based on \$3 a gallon fuel. And when
4 I did this there were people who disagreed with me
5 it would be \$3 a gallon but that happened to be
6 what I saw on the pump August 4 of 2006 here in
7 Akron. I said well, it is not going to get better
8 than this in the long run.

9 Now new technologies might add \$1 to \$2
10 to the price of a tire, increasing consumer tire
11 spending by \$1 to \$2 per year.

12 The important thing is not to shorten
13 wear life in our current business model due to a
14 choice of rolling resistance technology reduction.
15 Fundamentally if you think about it, the model we
16 use is we buy a tire, we use the tire, we dispose
17 of the tire. Trying to save fuel by reducing wear
18 life is not a good idea. We actually went through
19 a modeling process for this. Next slide.

20 Relative to wear. This part of the
21 rolling resistance coefficient versus uniform tire
22 quality tire grading tire wear grade looks like a
23 buckshot pattern on a wall. But it makes a point
24 that you could choose rolling resistance and you
25 don't have to necessarily choose poor wear life.

1 For example, let's just going in there and say
2 we're going to choose .009. You can see, I can
3 choose tires with grades from about 100 to almost
4 800. A high wear grade can be associated with
5 good rolling resistance. Next slide.

6 We recommended that Congress should
7 authorize and provide resources to NHTSA to gather
8 and report information on the influence of
9 passenger tires on tire fuel economy.

10 We recommended that the information
11 should be widely available and easy to understand.
12 And it needs to cover essentially the waterfront
13 in terms of tire size, models and types. This is
14 a complication because there are about 40,000 or
15 more stock keeping units for tires in this
16 country. Next slide.

17 We felt that there should be
18 consultation with the EPA on ways to convey the
19 information to customers.

20 That we needed to seek the participation
21 of the entire industry.

22 And the whole thing needs to be
23 periodically reviewed because if it really is
24 doing no good then why do it.

25 And we should accompany this with

1 efforts to promote tire inflation maintenance.

2 Next slide.

3 Now here is the \$64 question. Will
4 consumers respond? Right now we can't respond
5 because there is no rolling resistance information
6 available to us as customers. And now will people
7 respond if they have information? The Committee
8 doesn't really know. But we hope that it would
9 spur consumer interest once consumers realize the
10 high rolling resistance is like a tax. They pay
11 for nothing of value in order to drive.

12 Now this is an author's personal
13 comment: If you want to promote something don't
14 do it with dusty, bookish pamphlets and stickers.
15 Give the information to consumers with the push of
16 a good Budweiser ad. Pick the right spokesman.
17 You have to have life and you have to have pizzazz.
18 Next slide.

19 Do you have any questions and do I have
20 any time to answer questions?

21 MR. TUVELL: We have time for you to
22 answer questions, Marion, and we certainly want to
23 invite questions.

24 PRESIDING MEMBER BOYD: Thank you,
25 Dr. Pottinger. How about you folks out there, you

1 have some questions? Bob.

2 DR. SAWYER: Bob Sawyer, the University
3 of California at Berkeley. Would you comment on
4 the adequacy of the roller dynamometer test versus
5 flat road. Are there differences there and should
6 we worry about them?

7 DR. POTTINGER: There are indeed
8 differences. At the present time there is no
9 adequate flat surface commercial rolling
10 resistance machine. The flat track machine has
11 been built for general purposes and not aimed at
12 the very low level forces involved with rolling
13 resistance. So you would be in a machine
14 development project. Also these machines are much
15 more complex to maintain and are relatively
16 expensive.

17 PRESIDING MEMBER BOYD: Thank you. Any
18 other questions? Bob, another one?

19 DR. SAWYER: I don't want to dominate
20 this. Another question. I know that road surface
21 condition is not really part of the tire's
22 responsibility but could you say something about
23 how that plays into the rolling resistance of the
24 tires.

25 DR. POTTINGER: Yes, this was one of the

1 things that we on the Committee considered. If
2 you get a hold of TRV-286 you will see as part our
3 references the information we could find. The
4 rougher the road surface in terms of pebbly-type
5 texture the higher will be the rolling resistance
6 of the tire.

7 If the road surface has appreciable ride
8 roughness characteristics then you're going to
9 have energy losses that really migrate to the
10 shock absorbers or dampers on the vehicle. That's
11 about what I can say in short. But get a hold of
12 the report and the references are in there.

13 PRESIDING MEMBER BOYD: Another
14 question.

15 DR. MEIER: This is Alan Meier. Thank
16 you for that excellent presentation. You didn't
17 talk about original equipment tires. As a point
18 of reference can you say what the typical rolling
19 resistances are on tires that are supplied with
20 new cars.

21 DR. POTTINGER: Okay. If you go back to
22 the presentation. Excuse me just a moment. I'm
23 going to look back because there's one of the
24 slides and you may have missed something I said
25 about it so give me just a moment, please.

1 It would be slide number 11, rolling
2 resistance coefficients for A traction rated
3 tires. There's some horizontal colored bands on
4 there. There's a yellow band, a blue band and
5 then a sort of a striped band overlaid there. And
6 those bands, the blue band is for light truck P-
7 metric tires at the OE. These are all OE targets
8 that are shown. Touring tires are the ones with
9 the band, with the sort of hash band, and then the
10 yellow is for all-season tires.

11 And one thing that people should give
12 some thought to is what is the rolling resistance
13 relative to heavy duty truck tires. In that case
14 heavy duty truck tires would ride terribly because
15 they have very high inflation pressure. And the
16 thing also that's true is the traction behavior of
17 heavy duty truck tires is not nearly so good as
18 passenger tires. But that's sort of the limit
19 towards which you could push things I think. Does
20 that help?

21 PRESIDING MEMBER BOYD: Thank you again.
22 Any other questions?

23 It looks like there are no other
24 questions in the audience. Thank you, Doctor.

25 DR. POTTINGER: You're welcome.

1 PRESIDING MEMBER BOYD: We welcome you
2 to stay tuned in and chime in anytime.

3 DR. POTTINGER: I will for awhile. Late
4 this afternoon eastern standard I'll have to get
5 off because I have a call to Indonesia to make.

6 PRESIDING MEMBER BOYD: All right, we
7 welcome you to stay as long as possible.

8 DR. POTTINGER: Okay.

9 MR. TUVELL: Very good. Our next
10 speaker is Dr. Alan Meier. Dr. Meier is a senior
11 scientist at Lawrence Berkeley National Laboratory
12 in California and is a faculty researcher at the
13 Institute of Transportation Studies at UC Davis.

14 His early training was in chemistry and
15 economics with a PhD in energy and resources from
16 the University of California at Berkeley. He
17 published several papers on the use of small
18 vehicles in Southeast Asia cities and in Turkey
19 and Crete in the late '70s.

20 Since then most of his research has
21 dealt with understanding how energy is used and
22 how it is used more efficiently. His work relies
23 heavily on field measurements of energy use in
24 buildings and equipment.

25 About a decade ago he began to study

1 energy consumption in miscellaneous equipment and
2 more recently the energy use of appliances when
3 they are switched off. This research sparked his
4 interest in standby power and launched an
5 unusually successful global effort to reduce
6 standby power in all sorts of equipment.

7 He has also created the first real-time
8 web-based display of supply and demand for
9 electric power in California.

10 He recently completed a four year stint
11 with the international energy agency in Paris
12 where he began examining the miscellaneous energy
13 use in motor vehicles, often called the auxiliary
14 or off-test energy, and ways in which it could be
15 reduced. He organized three institutional
16 workshops on tires and other off-test components
17 and improving the fuel economic of heavy duty
18 vehicles.

19 Alan has published over 100 papers and
20 articles in journals, magazines and conference
21 proceedings, mostly about energy efficiency. He
22 also founded the magazine Home Energy and served
23 as editor in chief of Energy and Buildings.
24 Dr. Meier.

25 DR. MEIER: Thank you very much. It's a

1 little bit awkward sometimes to present the
2 results of a whole workshop but I'll try to make
3 it as colorful as possible. And worse, I have to
4 be honest because Commissioner Boyd was present
5 and he can contradict me if I exaggerate or --

6 PRESIDING MEMBER BOYD: I have no memory
7 anymore.

8 DR. MEIER: All right. So why did we
9 have this workshop on tires? In fact, I will go
10 backwards and say, notice one of the big problems
11 that we had, but also indicating the international
12 aspect of this conference is we could never agree
13 on how to spell tires. This was one thing that
14 came up time and time again. So the title had a
15 Y, but as you can see I will quickly switch to our
16 more familiar and American I.

17 So the group of seven and sometimes
18 eight of the richest countries in the world get
19 together every year. The presidents and prime
20 ministers and whatever leaders they are discuss
21 big, global issues and one of them has been, of
22 course, the environment, global climate change and
23 energy consumption.

24 They have become rather interested in
25 energy efficiency lately and they tasked the

1 International Energy Agency to find and make
2 recommendations to them of where they could work
3 together to reduce energy consumption. This is
4 actually a great opportunity because basically we
5 got to look around at almost anything we wanted to
6 and give them some concrete recommendations.

7 Which you will find rather odd at some
8 times because you see these large descriptions,
9 global prescriptions about energy use and so on,
10 nuclear power and disarmament, and suddenly things
11 like set-top boxes pop up in the recommendations
12 for energy savings and energy efficient tires.

13 They told us in the area of
14 transportation to find areas that would benefit
15 from international collaboration. And that's
16 actually both easier and more difficult because so
17 much of transportation is internationally
18 standardized but there may still be some areas
19 where some collaboration of energy savings might
20 occur.

21 Through kind of a process of elimination
22 we came up with the area of off-test fuel
23 consumption and trying to figure out how to deal
24 with the 20 percent or so of fuel consumption.
25 On-road fuel consumption is not captured in the

1 fuel economy tests. And one of the --

2 And as a result of that we had a series
3 of workshops, actually four workshops. The first
4 one was on tires, the second one is on air
5 conditioning, the third was on trucks and just
6 recently there was one on eco-driving. That is,
7 giving people, the drivers, better feedback on how
8 to drive more efficiently. I am going to talk
9 about tires.

10 So November of 2005 we had the first
11 conference workshop. We were I think a little bit
12 more fortunate. We had a very large, round table.
13 When you have an international workshop or an
14 international meeting at the IEA there's only one
15 big conference room and every country is equal and
16 every participant is equal so it's a very large,
17 round oval but you need binoculars to see the
18 people on the opposite side of the table.

19 Fortunately it was just the right
20 amount. Everybody was at the table. We had
21 manufactures of tires. We had some of the related
22 industries such as Rhodia who provide some of the
23 additives to the rubber, Schrader Tire Systems for
24 tire pressure monitoring, and other, we had some
25 other manufacturers. We had governments present

1 from the European Union, from the United States
2 Department of Energy. Nobody from EPA I might add
3 or NHTSA. We had two people from the California
4 Energy Commission, France, Germany and so on. We
5 also had lots of NGOs, universities and
6 consultants.

7 Well, I'm going to try to summarize some
8 of the things that happened in the workshop. To
9 many of the people there the most remarkable thing
10 is there were data. The whole discussion about
11 tire rolling resistance in the past has been the
12 absence of large amounts of rolling resistance
13 data.

14 And for reasons which I can't fully
15 explain manufacturers, NGOs, governments all
16 suddenly came up with data. And so we had more
17 data presented I think at this workshop than had
18 ever been presented before. So that actually
19 focused the discussions a lot more on well, what
20 kinds of differences were there between tires and
21 could you achieve different reductions in rolling
22 resistance without sacrificing some of the other
23 features.

24 One of the other ideas that emerged and
25 was obvious to some people, of course, was how

1 different the tire markets were in two or three
2 respects. One was between original equipment and
3 replacement tires, and of course between the
4 United States and Europe. How the cars in Europe
5 had different rolling resistance. The new cars
6 had different rolling resistances.

7 But also you could see the trends that
8 all the European manufacturers were moving towards
9 the American system of outfitting their cars with
10 very low rolling resistance tires. But at the
11 same time they acknowledged that there was a lot
12 of what I call wiggle-room or opportunities for
13 the automobile manufacturers to kind of circumvent
14 the regulations because you only need a certain
15 fraction of the cars to have a low rolling
16 resistance tire to qualify for the entire fleet
17 average.

18 One of the other things that became
19 evident is that certainly some of the
20 manufacturers and the NGOs were thinking about how
21 do you label energy efficient tires. A few
22 schemes were proposed and I am going to show you
23 an example in a moment.

24 One of the things that came out clearly
25 though is the manufacturers had already learned a

1 lesson that they couldn't make their own label.
2 That selling low rolling resistance or energy
3 efficient tires on their own just didn't work.
4 They needed to have a standardized label across
5 all manufacturers because consumers were skeptical
6 of the claims otherwise.

7 One of the things that we found
8 certainly important in its absence was the fact
9 that we could not get any independent data on the
10 costs of achieving further reductions in rolling
11 resistance. So everybody was confronted with the
12 fact that they could only look at the tires that
13 were on the market and could not go the next step
14 and say, well what happens if you do invest
15 another dollar. How much rolling resistance
16 reductions will you achieve and where is the cost-
17 effective minimum. And that's a problem that I
18 think we still face.

19 Just to summarize some of the data that
20 we saw. Here in very gross terms you can see that
21 the rolling resistance of some tires in passenger
22 cars ranged in kilograms per ton from 14 down to
23 7, so that is an enormous range. It's equally
24 almost as large for trucks. The important number
25 in Europe was that the typical rolling resistance

1 for tires was about 12 on average today. So there
2 was, as indicated in the previous presentation,
3 great potentials for reductions.

4 MS. SHAPIRO: You know what, I have an
5 important question.

6 DR. MEIER: You better go to the --

7 PRESIDING MEMBER BOYD: Come on Rosella,
8 follow the rules.

9 PRESIDING MEMBER BOYD: The staff
10 certainly needs to follow the rules.

11 MS. SHAPIRO: Rosella Shapiro, Fuels and
12 Transportation Division. Does your matrix show
13 that new car OE equipment versus replacement has
14 that great disparity or is that just the range? I
15 don't understand what that chart is telling me.

16 DR. MEIER: That was the range. And
17 notice also that it was in Europe, it was a
18 European survey. But it was the range of all
19 tires.

20 MS. SHAPIRO: All tires.

21 DR. MEIER: Yes.

22 MS. SHAPIRO: Mixed. No distinction
23 between OE and replacements.

24 DR. MEIER: There was no distinction,
25 yes.

1 MS. SHAPIRO: Thanks.

2 DR. MEIER: I wanted to show an example
3 of a labeling scheme that one of the manufacturers
4 had proposed. This may be a little bit difficult
5 for you to understand because they're using a --
6 there are two assumptions behind it.

7 First let me explain what the axes are.
8 The horizontal axis is tire diameter in
9 millimeters and then you can see rolling
10 resistance on the vertical axis.

11 The Europeans have used, have started a
12 whole series of energy labels which are
13 categories, usually A through F, and it's kind of
14 a rainbow sort of colors where A is green and F is
15 red, I believe. I didn't bring an example of that
16 but later if you want to I can pull it off my
17 computer.

18 So this manufacturer was trying to
19 figure out how to convert, to impose that kind of
20 A through F category scheme on the universe of
21 tires. The LET stands for low energy tire. And
22 you can see from the axis and from the legend he
23 has a LET1 and LET2 and then he goes to ULET,
24 which is an ultra-low energy tire 1 and 2.

25 And then he goes to an SULET, which is a

1 super low-energy tire, which allows him to make
2 these categories of about A through F I believe.
3 Then you can also see that there is an area shown
4 of the standard tires today, which I think he's
5 trying to get at somewhere around C.

6 Several of these kinds of proposals,
7 these ideas, were tossed around. We weren't there
8 to come to any consensus or resolutions. That's
9 not what the workshop was for. The idea was really
10 to just get some sense of what information was
11 available, what is the technical potential and is
12 this an area for international collaboration. So
13 here I am trying to summarize the sense of the
14 group rather than just, rather than trying to find
15 someplace where there was a unanimous vote. There
16 were no votes. There clearly were no consensuses,
17 if that's the right word.

18 So one point that came out fairly clear
19 is that there were still, of course, some
20 uncertainties about the differences in test
21 procedures. But everybody felt that, you know,
22 the differences in the test procedures, especially
23 between Europe and the United States, were
24 relatively small and it would not be that
25 difficult with a little bit of perhaps push from

1 the international agencies and authorities and the
2 governments to get a harmonized test method. So
3 that's where I say a harmonized test method for
4 rolling resistance was within grasp. It wasn't
5 there but, you know, with a little bit of a shove
6 from higher up people might be able to get that to
7 happen. And clearly the manufacturers would
8 appreciate that.

9 Some but not all of the tire
10 manufacturers supported establishing mandatory
11 efficiency levels. There were both public and
12 private opinions expressed so you could get some
13 sense that there was not unanimity and we were
14 still, the public statements and positions of some
15 of the manufacturers associations may not reflect
16 their actual opinions.

17 Everybody agreed, of course, that we
18 shouldn't force the manufacturers to offer tires
19 that have lower performance in other
20 characteristics in order to achieve lower rolling
21 resistance.

22 And as indicated earlier, everybody was
23 reasonably confident that even with today's tires
24 you could pay back the incremental cost of low
25 rolling resistance tires in fuel savings, in part

1 because there wasn't a clear incremental cost for
2 those low rolling resistance tires. So obviously
3 they're going to pay back. But people were sort
4 of thinking about, well what happens in the next
5 step if there was any kinds of constraints.

6 And throughout the whole workshop you
7 could get this feeling that there was nobody in
8 charge of this problem and that responsibilities
9 for fuel efficient tires was just dispersed over
10 so many agencies it was very difficult to deal
11 with the fact that we had -- Some people had to
12 think about maintaining the adequate pressures,
13 who is responsible for that.

14 We had safety and then we had fuel
15 economy. And you could see that several different
16 departments, ministries, agencies, whatever, all
17 had some sort of role but it was very difficult to
18 find anybody who was in charge. And certainly in
19 the case of fuel economy seemed to suffer.

20 One example of that was just how do you
21 label a tire for its rolling resistance? There is
22 already a kind of label fatigue. There is so much
23 labeling information on a tire already. Is it
24 going to be a new label that competes with the
25 existing labels on durability and so on or is it

1 going to be somehow integrated. And these were
2 the kinds of problems that you have to face when
3 you think of just having a label as your way of
4 informing people.

5 Well, you know, a workshop really
6 doesn't try to produce something but it's nice to
7 try to trace some of the impacts of the workshop.
8 In this case there were a couple of cases where we
9 saw some impact. I know for a fact that the
10 European Union wrote this sentence as a result of
11 this workshop. The sentence was:

12 "The Commission will issue a
13 mandate for a recognised European
14 Norm and possible international
15 standard for maximum rolling
16 resistance limits and labelling for
17 road vehicle tyres --"

18 So they're saying they're going to try to push to
19 get this test procedure finalized and then once
20 that's done they're going to start a minimum, some
21 sort of standard for rolling resistance.

22 Of course it is very much tied into the
23 politics of fuel economy standards in Europe,
24 which is politically very sensitive and has
25 Germany practically at war with France again. The

1 European manufacturers have presented information,
2 which I confess I haven't followed this closely
3 enough but I was a little bit surprised. It seems
4 to be evolving in a way.

5 At one point they said they supported
6 fuel economy standards, efficiency standards for
7 tires. But now they say, yes we support it, and
8 they have nuanced that with yes, we want to
9 package that with various procedures and programs
10 to monitor tire pressure.

11 Finally, there was one representative
12 from the National Academy Study at our workshop.
13 I believe the National Academy Study cites our
14 workshop but we are not exactly sure to what
15 extent they relied on the results but certainly
16 there was some sort of connection between the two.

17 So with that I think I've summarized
18 what happened at this workshop. It is almost
19 ancient history except there's also a lot of deja
20 vu here. We see that many of these concepts have
21 not really been resolved yet. Thank you very
22 much.

23 PRESIDING MEMBER BOYD: Thank you, Alan,
24 good to see you again. Now I'll entertain some
25 questions. There's one up here. Susan.

1 ADVISOR BROWN: Doctor Meier, what
2 recommendations would you have for this Commission
3 moving forward on tire efficiency given what you
4 learned at the International Energy Agency
5 workshop?

6 DR. MEIER: That's a very good question.
7 I think I have three. One is, we've got to
8 collect data, that's the first one. We need to
9 know what the existing situation is.

10 The second is we need to improve the
11 test procedure. Ideally if we could come up with
12 a test procedure that is harmonized globally, that
13 way we can use information results from other
14 countries to help inform our own decisions, our
15 own standards and analyses.

16 And eventually I think we need to have
17 the research to be able to say, well how much
18 further can we go in the area of improving,
19 reducing rolling resistance and how much does it
20 cost. There is very little public information in
21 that area.

22 ADVISOR BROWN: Can you also expand
23 further on your experience with the labeling
24 examples that you saw in Europe. I heard you
25 mention France again at war with Germany, and I

1 knew there were some proposals in Germany at least
2 to label tires.

3 DR. MEIER: Yes, there are. I believe
4 now there are some labels for tires, although it's
5 more in a green sense, in a broader sense. I am
6 skeptical of labels and their effectiveness for
7 consumers, changing consumers' behavior. They may
8 change manufacturers behavior, that they don't
9 want to display a label that shows their tire
10 having the highest rolling resistance, and so they
11 may seek to eliminate that tire or that model.
12 And that's good. But I think we should not rely
13 entirely on labels to move the market.

14 ADVISOR BROWN: Thank you.

15 PRESIDING MEMBER BOYD: Alan, you
16 brought up the issue of test procedures or test
17 protocols. What is your view on the ability to
18 have agreement internationally on a test protocol.
19 For instance, we have an SAE test protocol. I
20 hear a lot of agreement on that protocol. What is
21 your view with regard to it. And I think this is
22 a question probably addressed to international or
23 foreign tire manufacturers later today. But what
24 is your view of the likelihood or the speed with
25 which we could get resolution of an international

1 test protocol? And would the Europeans accept an
2 American-derived test protocol if there was
3 unanimous agreement over here?

4 DR. MEIER: I'd like to partly dodge
5 that question because I think there are some
6 people here who know a lot more about than I do.
7 But I do believe that maybe on the short term you
8 won't be able to get any agreement because these
9 test procedures are something that progress at a
10 glacial pace. I guess I shouldn't use the word
11 glacial pace anymore.

12 PRESIDING MEMBER BOYD: I still refer to
13 glacial alacrity as a favorite expression.

14 DR. MEIER: Anyway, but that doesn't
15 prevent various institutions from announcing that
16 they will in the future work towards an
17 internationally harmonized approach. And
18 therefore even if initially one test procedure is
19 adopted they can in the meantime be working
20 towards an international harmonized test
21 procedure.

22 PRESIDING MEMBER BOYD: I think we're
23 about to get a comment on that.

24 DR. MEIER: Yes, this is Tracey Norberg
25 from the Rubber Manufacturers Association. I had

1 planned to address this during my remarks earlier,
2 I mean later this morning, but since the topic has
3 come up maybe I can clarify now.

4 The SAE test method that I think you
5 heard Marion referring to earlier and there's some
6 other mention of is the established test method in
7 the United States. There is a single point
8 variation which the CEC testing was based upon.

9 However, the global tire industry is
10 currently working on an international test method
11 through ISO. It's ongoing and it is -- I mean
12 it's globally supported by the industry. And
13 actually it's being led by the United States. So,
14 you know, just to kind of clear up any
15 misunderstandings about that I would say there is
16 not any lack of consensus in terms of moving that
17 issue forward within the global tire industry.

18 PRESIDING MEMBER BOYD: So there is an
19 effort underway.

20 MS. NORBERG: Absolutely.

21 PRESIDING MEMBER BOYD: Is it glacial in
22 nature or do you have hope?

23 MS. NORBERG: You know, maybe we can
24 skip this in my slides so we don't waste time
25 coming up. But basically what the deal is that,

1 you know, it's an ISO process. They have
2 established mechanisms for moving forward. At the
3 earliest we're expecting early 2009 they'll have a
4 final standard.

5 But I think the important point to
6 really hit home is that it is not better or worse
7 or anything than the current SAE test method, it's
8 just different. And when I mean different I mean
9 different speed, different load and different
10 surface on the test wheel. And so does it yield
11 better results? No, it's different results. And
12 the idea is that when people are testing tires you
13 want to have results that all can be compared.

14 So I think it's an important distinction
15 to say it's not, it's not an improvement one way
16 or the other over existing test methods, it just
17 would be one that everyone in the world could use.
18 And by that same token it is important to also
19 understand that data that is gathered by the SAE
20 test method can be easily correlated to data from
21 an ISO test method. And a migration from one test
22 method to the other shouldn't be difficult, it
23 shouldn't be controversial and it should be fairly
24 seamless. So even though the ISO test method is
25 down the road a little bit it shouldn't in any way

1 hold up this process. And we, you know, pledge to
2 work with the Commission when the national test
3 method is available.

4 PRESIDING MEMBER BOYD: Thank you. Now
5 that we essentially broached the subject I'll keep
6 you hanging here a minute longer. Is it your
7 view, and maybe we can defer this to when you do
8 testify or you do your presentation. But I would
9 like to leave the question on the table if you
10 don't want to answer it now.

11 Is it your view that the test method
12 that will come from this process will truly be --
13 well you said it will be internationally accepted.
14 But will it really be the best possible test
15 method? The one that gives us the most
16 understandable, acceptable data on this subject.

17 What I have in mind, unfortunately, as
18 an analogy is the EPA fuel economy data. Many of
19 us for years knew that the public was not being
20 given a really good view of the performance of
21 vehicles. and finally after decades just recently
22 the EPA, you know, the test procedure has been
23 modified and the public now gets new data. Will
24 we leap over that kind of a dilemma to what is
25 probably the --

1 MS. NORBERG: What I'd suggest, I'll
2 give you an answer and then if any members of our
3 association have any additional comments that I
4 may have missed I'll ask them to leap forward and
5 add to what I say.

6 But basically it's important to keep in
7 mind what the international test method and the
8 SAE test method are both designed to do. They're
9 designed for regulatory development and compliance
10 purposes so that we can compare tires. They're
11 not designed so that we can assess how every tire
12 will perform on every vehicle.

13 And the challenge with the EPA method
14 that you're speaking of is really, are you showing
15 what real world a car is doing on the road and
16 that's where the challenge has been in terms of
17 the, you know, EPA test methods versus the window
18 stickers.

19 But here we're talking about something
20 different. We're trying to say, you know, we have
21 a group of ten tires and we'd like to rank order
22 those tires and understand how they perform
23 relative to one another. And so from that
24 perspective this test will do that. The SAE test
25 will also do that. So it's important to

1 understand, is this the test that will tell us
2 everything about how a tire performs in every
3 situation? No, but it is a test that will allow
4 us to rank tires, give consumers information and
5 make regulatory decisions. So from that
6 perspective it accomplishes that goal and we fell
7 that it would do that well. But also the SAE test
8 does. And I don't know if you all --

9 PRESIDING MEMBER BOYD: Thank you.

10 DR. MEIER: I would add that any energy
11 test procedure is a compromise between making sure
12 that it does reflect, that what you measure in the
13 laboratory, that if A is better than B in the
14 laboratory there is also going to be that A is
15 going to be better in the field and the same
16 ranking will occur. As much as possible you're
17 going to also be able to say, if you measure the
18 rolling resistance in the laboratory you can
19 correlate it to what it is in the field.

20 But it is a compromise. If you want to
21 invest a lot more in having an expensive kind of
22 test procedure then you may be able to get better
23 accuracy maybe in the field prediction or
24 something like that. But I don't think this is
25 really a problem. I think what you're seeing is

1 we're strongly agreeing with each other.

2 MS. NORBERG: And I would say the
3 process is well underway. I don't think any push
4 from anyone else will move it faster. From what
5 I've learned ISO sort of has a prescribed speed at
6 which it proceeds. But it is well underway and it
7 is being, it is being headed by US industry.

8 DR. MEIER: I'm not sure I agree with
9 that last statement, that ISO, that you cannot
10 influence the speed at which it moves. Because
11 each of the countries has kind of a veto power or
12 something like that. But maybe we can have
13 another speaker address that.

14 MR. WISCHHUSEN: Excuse me, Mike
15 Wischhusen from Michelin. This is a subject very
16 near and dear to my heart because the
17 international effort is being led by a member of
18 my staff so I know the subject quite well.

19 ISO has a standard time line and an
20 accelerated time line. The rolling resistance
21 standard is working on the accelerated time frame.
22 And just coincidentally the international group is
23 meeting next week in Washington DC. So this is a
24 very high profile effort, a very high effort
25 project and it is going on an accelerated time

1 line. Thank you.

2 PRESIDING MEMBER BOYD: Thank you very
3 much. Any other questions or comments for
4 Dr. Meier? I guess not.

5 Alan, thank you very much.

6 MR. TUVELL: Bear with me here as we go
7 through the transitional. As it turns out, our
8 next speaker will be focusing in on the testing
9 procedures. Okay.

10 Our next speaker is Dr. Jim Popio. Jim
11 is the director of engineering services of the
12 Smithers Scientific Services and Ravenna
13 Laboratory in Ravenna, Ohio. Jim has over 15
14 years of engineering and technical experience in
15 material behavior.

16 Jim received his PhD in engineering from
17 the University of Akron, majoring in material
18 behavior and thermodynamics. He also received his
19 BS and MS in mechanical engineering from the
20 University of Akron.

21 Jim, I hope you're there and you heard
22 the previous discussion on the tire testing
23 procedures so it's a good lead-in for you.

24 DR. POPIO: Yes. Can you all hear me
25 okay?

1 PRESIDING MEMBER BOYD: Yes, very well.

2 DR. POPIO: Okay, good. Tracey and
3 everybody kind of set me up here to give you an
4 overview of the SAE rolling resistance task group.
5 If we go to the -- I think we have control of the
6 slides here maybe?

7 MR. TUVELL: Yes, give it a try. And if
8 not we'll do it from here.

9 DR. POPIO: If we just go to the next
10 slide that's fine.

11 MR. TUVELL: Okay. Hold on a second
12 then while I resume control. Okay.

13 DR. POPIO: Back in April of 2006
14 Drs. Pottinger and Luchini presented a paper where
15 they were comparing, I think it was kind of a
16 fallout of that presentation that you got earlier.
17 They were comparing issues between a few SAE
18 recommended practices.

19 And the information that was shown was
20 interesting enough to the SAE Highway Tire Forum
21 Committee, HTFC, to create a task group to analyze
22 or investigate some of the technical concerns.

23 The group consists of myself, the
24 Chairperson, 23 participating task group members,
25 I think you might have a few out there, and 19

1 organizations represented from independent testing
2 laboratories to automotive manufacturers, tier one
3 producers, so on and so forth.

4 The charter of our task group was to
5 investigate the fidelity and application of SAE
6 J1269, and I'll give you a little more information
7 on that in a moment, and SA J2452. We're looking
8 at any issues or discrepancies between the two
9 standards, investigating the single-point testing,
10 which is included in J1269. We're looking at any
11 potential technical issues there may be with that.

12 Identify and form task groups as
13 required then propose any updates or revisions to
14 the standards. We have an annual or every so many
15 years the standards are reviewed and re-approved
16 or edited, modified, depending on what needs to be
17 done. If we could go to the next slide.

18 SAE J1269. And this is information
19 right out of the foreword and scope of the
20 procedure or practice. It provides a method for
21 determining rolling resistance of passenger car,
22 light truck and highway truck and bus tires under
23 controlled conditions.

24 The procedure is intended to provide a
25 way of gathering data on a uniform basis to be

1 used for various purposes. And I think Tracey
2 kind of eluded to these as well. For example,
3 tire comparisons, determination of load or
4 pressure effects, correlation with test results
5 from fuel consumption tests, et cetera.

6 Again, this practice, J1269, it's
7 applied to passenger car tires, light truck tires,
8 highway truck and bus. It is a steady state-type
9 procedure. It has constant velocity but it has
10 varying loads and inflation pressures.

11 And the last slide is SAE J2452. This
12 is a little bit different. It's a recommended
13 practice that establishes a laboratory method for
14 determination of tire rolling resistance of
15 passenger car and light truck tires. It does not
16 include the truck and bus tires.

17 It provides a standard for collection
18 and analysis of rolling resistance data with
19 respect to vertical load, inflation pressure and
20 now velocity, where J1269 did not have a velocity
21 component.

22 The intention is to estimate tire
23 rolling resistance contribution to vehicle force
24 applicable to SAE vehicle coastdown recommended
25 practices J2263 and J2264. It is typically used

1 by the vehicle producers to help with their CAFE
2 modeling.

3 The scope. This is recommended practice
4 again. It applies to passenger car or P type
5 tires, light truck metric, light truck high
6 flotation tires or similar tires approved by
7 bodies other than the Tire and Rim Association.

8 The methodology is applicable within
9 normal operating ranges of vertical load,
10 inflation pressure and for velocities between 71
11 miles per hour and 9 miles per hour. In other
12 words, we do a coastdown-type test on the tire to
13 get the effects of velocity.

14 This procedure is applicable only to
15 operation in the free-rolling mode at zero slip
16 and camber angle for ambient temperatures between
17 20°C and 28°C. And it is typically run on 1.2
18 meter and above diameter road wheels or drums,
19 depending on how you'd like to refer to it.

20 And that's kind of an overview of the
21 SAE Rolling Resistance Task Force. Again, it's
22 part of a greater, a larger organization, the
23 Highway Tire Forum Committee. And we are tasked
24 with updating and/or working on these standards or
25 practices. Are there any questions?

1 PRESIDING MEMBER BOYD: Thank you. Yes,
2 here comes a question.

3 MR. TONACHEL: This is Luke Tonachel
4 with the National Resources Defense Council.
5 Dr. Popio, I just wondered if you could go back to
6 to your slide on J1269. You had mentioned a
7 correlation with test results from fuel
8 consumption tests. Could you expand on that a
9 little bit.

10 DR. POPIO: Well oftentimes though -- I
11 mean, what's that alluding to and when the task
12 groups originally developed these they were
13 explaining how it was used. I mean, this is a
14 recommended practice on how to measure a tire.
15 How folks use the data is not specified. The
16 developers in the beginning, it is my
17 understanding that they were using this data along
18 with findings from say a fuel economy test or
19 whatever to do some correlations.

20 MR. TONACHEL: Okay, thank you.

21 ADVISOR BROWN: Dr. Popio, this is Susan
22 Brown. Could you explain how these two tests are
23 used. Are they used in combination to verify
24 results? Both of them get at rolling resistance.

25 DR. POPIO: Right.

1 ADVISOR BROWN: I'm just trying to
2 understand better. Are they options or are they
3 used one to verify the other or how?

4 DR. POPIO: They kind of are -- You'll
5 get it from a benchmarking or a tire comparison
6 point of view, SAE J1269 seems to be the method of
7 choice. In other words, it is used to compare
8 tires.

9 J2452 can do the same but it has a
10 vehicle component and it is used more, it was
11 developed actually as an initiative by the vehicle
12 manufacturers so it is more vehicle-centric. So
13 they both will give you values but it's kind of
14 like Tracey said earlier, you get different
15 results. For 2452 you have a matrix of loads and
16 pressures and speeds, and with J1269 it's a
17 steady, it's one speed, it's 50 miles per hour and
18 it has a matrix of load and pressures. So the
19 speed effect is kind of ignored in that one and
20 used in the other one. Does that help at all?

21 ADVISOR BROWN: Yes, thank you. This is
22 a little bit like, everything you wanted to know
23 about tire testing but were afraid to ask.

24 DR. POPIO: Right, exactly.

25 MR. TUVELL: May I ask a question also?

1 Jim, this is Ray Tuvell. Is there perceived any
2 major shortcomings with 1269 at the present time?

3 DR. POPIO: There are no perceived
4 shortcomings at the time. There are -- I mean,
5 we're obviously looking at it from the technical
6 perspective, making sure there are no holes in it
7 right now. With all the extra focus I guess on
8 the test methods. But right now I don't see any
9 major shortcomings. I mean, there's minor details
10 or inconsistencies between 2452 and 1269 but as a
11 whole it seems to be an effective method to
12 evaluate tires.

13 MR. TUVELL: And once one other
14 question. Historically how long has this
15 procedure been out and in use in the industry? Do
16 you happen to know?

17 DR. POPIO: I can't remember the
18 original date. Was it the '70s? I probably have
19 a copy of it here.

20 MR. TUVELL: Yes, just approximate is
21 fine.

22 DR. POPIO: It's been around for a
23 number of years. If I can find it. I'm not sure
24 of the exact date but I know it's before -- it's
25 before my time in this industry for sure.

1 MR. TUVELL: Okay, that's fine.

2 MR. AMOS: Thirty years.

3 MR. TUVELL: Thirty years, Don Amos
4 tells us.

5 DR. POPIO: Okay. That seems about
6 right.

7 MR. TUVELL: Any other questions? All
8 right. Okay, thank you, Jim.

9 DR. POPIO: Thank you.

10 MR. TUVELL: Hold on a second for the
11 transition again. Okay.

12 And Bruce, are you there?

13 MR. LAMBILLOTTE: I'm here Ray.

14 MR. TUVELL: All right.

15 MR. LAMBILLOTTE: I'm not sure if we're
16 controlling it. If we do we'll have it into --

17 MR. TUVELL: Okay. I think we're having
18 the same problem that we did the other day during
19 the dry run so let me go ahead and set up to run
20 it from here.

21 MR. LAMBILLOTTE: That's fine.

22 MR. TUVELL: Okay, we're ready here,
23 Bruce. Hold on a second while I do the
24 introduction.

25 Bruce Lambillotte is the General Manager

1 of the Smithers Scientific Services Akron
2 Laboratory in Akron, Ohio. Bruce has over 34
3 years of technical experience in the tire
4 industry. He has made numerous presentations as
5 well as published a number of technical articles
6 on a variety of subjects pertaining to tires.

7 Bruce has a BS degree in chemical
8 engineering, and a master's in business
9 administration from the University of Akron. It's
10 all yours, Bruce.

11 MR. LAMBILLOTTE: Ray, we're here to
12 talk this afternoon about the Task 4 Rolling
13 Resistance Program. Task 4 refers to the main
14 body of the rolling resistance work that was done
15 within the realm of the contract.

16 To get to that we'll have to back up
17 just a little bit and briefly review the
18 development of the test protocol that was used for
19 the study and also our philosophy, the philosophy
20 of the Energy Commission in determining tire
21 selection for Task 4.

22 So if we go to Image 2 we can start and
23 briefly go over the methodology that we used to
24 arrive at a test protocol that we could use for
25 the main body of work. Image 2, Ray.

1 MR. TUVELL: Okay. I'm on page one, do
2 you want to go to page two?

3 MR. LAMBILLOTTE: Yes.

4 MR. TUVELL: Okay. Are you able to view
5 it on your end, Bruce?

6 MR. LAMBILLOTTE: Okay, next image.

7 MR. TUVELL: We're losing the audio on
8 this end.

9 MR. LAMBILLOTTE: Ray?

10 MR. TUVELL: Yes, you're breaking up
11 right now, Bruce.

12 MR. LAMBILLOTTE: Let's get adjusted
13 here from our end. Let me try -- stop me if you
14 need to.

15 MR. TUVELL: Yes. I think we're going
16 to need to go back first to the beginning of the
17 presentation. I'm on page one of your slide, the
18 page numbered one. Could you pick it up at that
19 point, please.

20 MR. LAMBILLOTTE: Okay. What we're
21 seeing, Ray, right now is Slide 3.

22 MR. TUVELL: Okay, and I'm on Slide 1.
23 So if you have a hard copy you could look at.

24 MR. LAMBILLOTTE: Fine.

25 MR. TUVELL: Pick it up at Slide 1 and

1 we'll go from there.

2 MR. LAMBILLOTTE: That's fine. Just
3 tell me where we're at.

4 MR. TUVELL: Sure.

5 MR. LAMBILLOTTE: Let's start with Slide
6 1. As I said, before I get into the discussion of
7 any rolling resistance testing we'll discuss
8 briefly the selection of the testing protocol that
9 was used for the contract and also the criteria
10 that was established by the Energy Commission and
11 implemented by Smithers Scientific for selecting
12 and purchasing tires. I am now on Image 2, Ray.

13 MR. TUVELL: Okay, go right ahead.

14 MR. LAMBILLOTTE: When we started to
15 work we were dealing with two US protocols,
16 accepted protocols that covered the main body of
17 work that was conducted on rolling resistance in
18 the US. And those were J1269 and J2452, both of
19 which were discussed by Dr. Popio.

20 We initiated work in this phase two task
21 protocol development by purchasing 200 tires, ten
22 groups of 20 tires each, splitting those bodies of
23 tires in half and running each half using each
24 protocol. The data, the results of that work were
25 then regressed back to what we referred to as

1 standard reference conditions. And by that I am
2 referring to approximately 70 percent of labeled
3 load at 38 PSI at 50 miles per hour. And that was
4 done with both test protocols.

5 So in this image you're looking at a
6 correlation of a single, regressed set of
7 conditions from a more complex matrix of
8 conditions. And as you can see if you regress
9 back to these three parameters, these three sets
10 of parameters, using the body of data we found a
11 very good correlation. And all this is is you're
12 looking at the rolling forces.

13 If you look at the next page, Ray,
14 shifting to page three.

15 MR. TUVELL: Yes.

16 MR. LAMBILLOTTE: We're looking at a
17 similar depiction of the data. But here the
18 results have been factored according to the load
19 that was applied upon the tire. And what we mean
20 by that is we have adjusted the data and then we
21 have again drawn the correlation. Again, these
22 same sets of conditions. The standard reference
23 conditions, the 70 percent load, 38 PSI, 50 miles
24 an hour. And again we see extremely good
25 correlation.

1 And this gave us confidence at this
2 point that we now had liberty to pick between
3 these two protocols for other conditions with the
4 feel that they could correlate really well. We
5 could run more tires similarly with respect to the
6 coefficient or separately with respect to the
7 rolling forces and get reasonably good agreements.
8 We'd evaluate those studies and make sure that was
9 true.

10 We now selected J1269 to be our
11 foundation protocol and that was done largely
12 because it was a similar test procedure, it was an
13 easier test procedure. It was a little bit easier
14 to explain and it had an older history of use.

15 We next took that test protocol and
16 said, well if we can regress to those conditions
17 can we test directly to those conditions? And if
18 you look now on page four you'll see a subsequent
19 evaluation was conducted with testing directly to
20 the standard reference condition.

21 So here we were looking at evaluating
22 the test protocol J1269 with the complete
23 implementation of the test procedures and then
24 regressing back to standard reference conditions.
25 And then doing similar testing with the same kinds

1 of tires and yet testing directly to standard
2 reference conditions. And the correlation again
3 was pretty good.

4 And at this point we had the test
5 protocol with the use for the balance of the body
6 of testing that was conducted. So basically we're
7 talking a test protocol that is testing at a
8 single set of conditions. We're looking at a 70
9 percent load, 38 PSI and 50 miles an hour.

10 So that's the kind of work that was
11 conducted as a foundation of development to get a
12 very simplified protocol that could allow us to
13 screen a very large number of tires, which is the
14 ultimate intent of the Task 4 program.

15 And I think I've covered during that
16 discussion, Ray, a lot of the conclusions that
17 follow in pages five and six. We did check on
18 test reproducibility. For the test
19 reproducibility we employed populations sizes of
20 five tires each in subsequent work and we found
21 that that gave us a very good level of confidence
22 in the results we were getting.

23 So moving forward in the discussion we
24 are now at having selected a single point test.
25 We had originally be guided by SAE J1269 and were

1 ready to move forward.

2 I have now moved on to page seven so if
3 you can page quickly through, Ray, I'll cover the
4 conclusions. I really want to talk about the
5 selection criteria for Task 4.

6 MR. TUVELL: Okay.

7 MR. LAMBILLOTTE: If we can move forward
8 to page seven.

9 MR. TUVELL: We're on seven.

10 MR. LAMBILLOTTE: In working with the
11 California Energy Commission and the project
12 manager at the Energy Commission then we set up a
13 number of criteria that we wanted to follow as we
14 were picking tires.

15 We wanted to select tires for regular
16 production. We were not interested in introducing
17 experimental tires into the program. We were
18 interested in looking at both original equipment
19 and replacement tires in our population.

20 We were not trying to isolate tires on
21 the basis of speed ratings or market types. We
22 had a variety of speed ratings and a variety of
23 market types. When I'm referring to market types
24 I'm using the terminology in terms of, for
25 example, touring tires versus all-season, high

1 performance.

2 We wanted to look at a broad variety of
3 manufacturers. We did not want to limit our work
4 to US manufacturers. We also included
5 international manufacturers that had tires that
6 were imported into the US marketplace. We wanted
7 to look at a very broad range of tires so that
8 kind of limited us in terms of numbers that we
9 could look at. And to get a really broad look at
10 the marketplace we only wound up settling on the
11 basis of the Energy Commission's direction on two
12 sizes. You'll see the large bulk of the work in
13 this Task 4 was conducted on two radial passenger
14 tire sizes.

15 Finally, there is another piece that was
16 carved out of the program. In looking and doing
17 so much work with these two sizes we wanted to
18 have still a piece of the Task 4 budget and the
19 Task 4 body of work cast aside so that we could
20 specifically look at the one aspect of tire size.

21 We called that the tire size impact
22 study and we had criteria for that also. We
23 wanted to look at strictly a broad market
24 replacement tire. It needed to be a standard,
25 all-season. A very common, generic tire in the

1 marketplace. There needed to be many sizes
2 available.

3 And what you'll find as we get into this
4 discussion, we basically went into the marketplace
5 and we selected one manufacturer's tire that was a
6 very important broad line replacement tire in the
7 marketplace and we purchased every size available.
8 We only purchased 28 sizes for a total of 140
9 tires but it's a tire size impact study and we
10 will get to the discussion of that. I'm ready for
11 page eight, Ray.

12 MR. TUVELL: All right.

13 MR. LAMBILLOTTE: This is a summary
14 after implementing the plan for purchases. The
15 discussion that we just had on the criteria only
16 evolved into a lineup of tire purchases, what you
17 see on Image 8. The two sizes that we looked at
18 were a P195/65R15, and that includes 195 metric
19 equivalents in that size. And we had 76 groups of
20 manufacturer/design combinations in that size.

21 We also looked at a larger size and
22 that's the large SUV size, 265/70R17. Those are
23 44 groups of manufacturer/design combinations
24 there. All of this work was done in five tire
25 groups.

1 Finally, I mentioned the tire size
2 impact study. We did carve out a portion of the
3 project for that purpose also. Again this was all
4 conducted in one manufacturer/design combination
5 in the marketplace. Here again we looked at 28
6 sizes, five tires per size.

7 So at this point that is a summary of
8 the criteria of tire selection and the test plan.
9 And if we're ready I'd like to go on to page nine
10 and we'll begin the discussion of Task 4, the main
11 body of testing.

12 MR. TUVELL: Go right ahead.

13 MR. LAMBILLOTTE: First I'd like to
14 touch on the goals for Task 4. These were the
15 goals that were given to us from the Energy
16 Commission for Task 4. I guess you could say this
17 was our mission statement.

18 First, we only wanted to look at a very
19 broad range of tires coming in in two basic sizes
20 to generate rolling resistance data for those two
21 sizes.

22 We wanted to then try to answer a few
23 basic questions. The first one very simply and
24 obviously, in looking at a very large number of
25 tires in the marketplace in any given size, what

1 can we expect as far as the distribution of
2 rolling resistance values.

3 We heard some statements saying that you
4 might expect the lowest rolling resistance tires
5 for a given size to be about half of what the
6 highest rolling resistance tires might be in a
7 given size. Is that really true? That's the kind
8 of goal we were also looking for to answer in
9 looking at this large body of tires.

10 For an individual that going into the
11 marketplace who wishes to replace the tires on
12 their vehicle, what can they expect as far as
13 potential for correlating very simple
14 characteristics of the tire to rolling resistance.

15 Right now there are no rolling
16 resistance grade labels on the tire but is it
17 possible for the consumer to relate to very simple
18 things about the tire? For example, tire weights,
19 outside diameters, tread wear ratings, tread
20 depths, price. Can those things be related to
21 rolling resistance? One of the missions of this
22 project, specifically to Task 4, was to try to
23 answer that kind of a question.

24 Going on we tried to answer the
25 question, original equipment tires. We've already

1 heard today that we should expect lower rolling
2 resistance with original equipment tires. How do
3 they relate in these two major sizes to the
4 replacement market tires we also evaluated?

5 Finally, going on we looked specifically
6 at size within a single manufacturer's design/
7 combination. What can we expect as far as a
8 factor of rolling resistance responses? And
9 that's that tire impact study that I referred to.

10 Now I'd like to go on and briefly look
11 at a summary of the results of the body of work.
12 I'm sure you can imagine that the test data coming
13 out from 740 tires being tested for rolling
14 resistance is a very large body of information. I
15 merely hope to give you a brief review of Task 4
16 in this basic presentation. I think this kind of
17 data that will be studied for quite a few months
18 in the future once the data has all been released.

19 In looking at Task 4 results first we'll
20 look at some of the data in terms of histograms of
21 responses, not only of the rolling resistance
22 values but also of the tire characteristics that
23 were being monitored, and going on and attempting
24 to correlate those simple aspects of the tire for
25 the rolling resistance results, and I'll close on

1 the tire size impact study.

2 This presentation was given this past
3 fall during October to the ACF, American Chemical
4 Society Rubber Division. It is the second
5 presentation that has been given without the
6 release of hard copy papers involving the program.
7 The first one was a year ago in the fall to the
8 International Tire Exposition conference.

9 At that first conference we simply
10 presented on the issue of development of the test
11 protocol. In this past presentation that involved
12 the ACF Rubber Division we presented, the Task 4
13 results were presented in exactly the same
14 presentation you're seeing.

15 Now in that presentation we did not have
16 results of the OE versus replacement tire
17 correlation. And that is the presentation that at
18 this point is planned for next spring. But I can
19 probably answer some fundamental questions about
20 that at the end of this presentation if we need
21 to.

22 So let me go on and let's look at some
23 of this data. First let's look at some of these
24 histograms of results. You're going to be seeing
25 the data first on the smaller size, the 195/65R15,

1 and then the larger size as we go through. And we
2 are now on page 11, Ray.

3 MR. TUVELL: Yes, go right ahead.

4 MR. LAMBILLOTTE: First and foremost
5 let's look at the responses for the rolling
6 resistance. We see some abnormal distribution
7 there and we see an average rolling resistance
8 response here of 9.7 pounds of rolling resistance.
9 Again, this is the single point direct test that
10 we are using for this.

11 The Y axis here is frequency in terms of
12 numbers of tires that showed this response. We're
13 looking at 380 tires of the 195/65R15s in this
14 population and we can look at the spectrum of
15 rolling resistance responses we saw.

16 Now before I go on let me explain
17 another issue. And that is, the data you're going
18 to see has rolling resistances expressed as
19 rolling forces as we go through this, and rolling
20 force is expressed in English units in terms of
21 pounds.

22 It is important to note that when we
23 looked at these tires and examined the sidewalls
24 and we selected 70 percent of load based on our
25 examinations of sidewalls we found the vast

1 majority exhibited similar load labeling on the
2 sidewalls of the tires. On the basis of that we
3 tested all tires in those sizes against a primary
4 load that was shown.

5 So when you look at this data for the
6 rolling resistance representing these two sizes,
7 the correlation -- the relationship you see and
8 the expressions that result in terms of rolling
9 forces and pounds are the same as you would see if
10 you were looking at the rolling coefficient.

11 Because we've used the same loads on all of the
12 tires that are depicted here. So differences in
13 expressing the data between rolling forces and
14 rolling resistance coefficients are not an issue
15 as we look at these within the individual sizes.

16 Let me go on. We are now on page 12.
17 Page 12 shows results, again, rolling forces in
18 terms of pounds and the histogram and the
19 distribution of responses. Here for the 17 inch,
20 this is a large SUV size of tire. Here we're
21 looking at the results of 220 tires. So this
22 gives you an idea of the spectrum of rolling force
23 responses that we saw looking at the population.

24 Let's go on to page 13. I'd like to
25 briefly go through these. We can go through these

1 relatively quickly. To give you an idea of the
2 other parameters we were looking at with respect
3 to the tires. As we went through and made rolling
4 resistance measurements. Here we're looking at
5 the tire weight. And we can see the distribution
6 of tire weights on page 13 of the 195. And if we
7 go on to page 14, the distribution of weight for
8 the 265 17-inch size tires.

9 So we're looking at a very -- We're
10 still looking at a rather broad range of weight
11 tires. We're looking at approximately a 20 pound
12 tire versus a 40 pound tire. If we go on and look
13 at diameters and the range of diameters I would
14 point out here you want to look at the X axes as
15 we go through these. These are very, very small
16 differences in tire diameters.

17 So you're going to see as we go and we
18 get in further into this discussion result you're
19 going to find that when we attempt to correlate
20 with some of these factors, certainly in issues
21 obviously like overall diameter, we don't have a
22 real good chance of seeing quality correlations
23 because we're looking at very tiny differences in
24 overall diameters.

25 Nevertheless the original mission was

1 take fix very simple characteristics of the tires
2 and to see if we could ultimately correlate
3 rolling resistance with those simple
4 characteristics. And that's on page 16, Ray.
5 This is the histogram with the overall diameter of
6 the 17-inch tires. Again, looking at the X axis,
7 very small differences in outside diameters.

8 Going on to page 17. The next
9 characteristics of tires that we documented off
10 the sidewalls of the tires were the tread wear
11 ratings. And these are UTQG tread wear ratings.
12 Of course if you're familiar, fairly familiar with
13 tires, the marking of tires in the marketplace,
14 you know that although the task is based upon an
15 actual fleet test of tires and on-vehicle tests,
16 the assignment range is also impacted by other
17 things, including the stratification of the
18 product in the marketplace.

19 But this is a double correlation between
20 the rolling forces that were measured on the tires
21 -- Excuse me, this is a simple depiction of the
22 tread wear ratings we ran on the sidewalls of the
23 tires. Page 17 for the 195 and going on to page
24 18 for the 17-inch tires. A very broad range of
25 tread wear ratings in both cases.

1 I think we should expect in going on to
2 page 19 that we're probably not going to see big
3 differences in tread depth in these tires. Indeed
4 we did not. I didn't mention it but I should
5 mention at this point that we were not looking at
6 winter tires. These populations do not include
7 deep-tread winter tires. The 17-inch tire also
8 did not include high-low capability products in
9 the marketplace. For example, C, D or E load
10 range tires, types of tires.

11 So within an inch of these two sizes we
12 were out seeing deep differences in tread depth.
13 And you can see that that's the case both on page
14 19 with a 15-inch tires, on page 20 with the 17-
15 inch tire.

16 Price. Price has been raised as an
17 issue that the Energy Commission wanted to examine
18 at the very beginning of the program. It's a
19 point that got raised a number of times, this
20 rolling resistance as a function of the price of
21 the tire. If it's more expensive can we expect a
22 lower rolling resistance for a more expensive
23 tire? We were asked that, we were asked to look
24 at that by the Energy Commission.

25 And we see the price of the tire. These

1 are the retail prices we paid in the marketplace
2 for these tires. All of the tires were all
3 purchased from a single retailer who has, covers a
4 multi-state area and who provides not only
5 replacement tires but also original equipment
6 labeled tires to all these vehicle dealers. And
7 these are the prices that we paid for those tires.
8 You can look and see on pages 21 the prices paid
9 for the 15-inch tires and on page 22 for the 17-
10 inch tires' distribution.

11 At this point if I may I would like to
12 go on and talk about the attempts to correlate the
13 results of these very simple, tire parameters with
14 rolling force values that were measured. And we
15 can go on, Ray, to page 24 and begin that work.

16 MR. TUVELL: Okay, Bruce.

17 MR. LAMBILLOTTE: So now we're looking
18 at a number of simple correlation studies. I
19 wouldn't put much stock in the blue line you see,
20 it's a computer-generated line. That line is
21 generated regardless of the quality of the
22 regression analysis that was done within the
23 correlation study. These are all simple layer
24 correlations studies.

25 It should be noted here that there was

1 no attempt and no desire for the purpose of this
2 study to get into multiple correlation analyses or
3 non-layered correlation analyses, regression
4 analyses. We're simply looking to see if there
5 were just basic, simple layer relationships from a
6 staking purpose of very simple characteristics of
7 the tire and actual measured rolling force values.

8 Starting on page 24 we're looking at
9 responses of the 15 inch tires and we can see that
10 this point of scattered data, we looked at
11 probably what was a much larger population result
12 of tires from -- in a previous presentation we
13 also saw a similar scatter here.

14 So we're not seeing a very high
15 correlation here. If there is a relationship
16 here, and perhaps there is, it's very weak.
17 There's a lot of scatter. That's true of both if
18 we're only getting 15-inch tires or if we go on
19 and look at -- and I'm sorry I don't have all the
20 correlations for the 17-inch tires due to the need
21 for brevity here. But we see a very similar thing
22 in looking at the actual report for the 17-inch
23 tires.

24 The regression work I'm going to show
25 you is for the 15-inch tires. It's the larger

1 population. I don't have the 17-inch tire
2 correlations to show you due to the time that
3 we're allotted here but I will tell you that the
4 relationships are very similar. You're going to
5 see very little in terms of linear correlations
6 between rolling forces and simple tire
7 characteristics. And it's true, as you'll see for
8 the 15-inch tires, and it is also true as you will
9 not be seeing this afternoon, also for the 17-inch
10 tires.

11 If we go on, we're on page 25 now, and
12 look at the relationship between rolling
13 resistance forces and overall diameter. Again
14 we're looking at extremely random results in terms
15 of a lack of correlation here. We cannot look
16 simply, strictly at overall diameter and correlate
17 that with rolling resistance. And it's true as
18 you see here in the 15-inch tires, it's also true
19 in the 17.

20 And if we keep going right on through,
21 page 26 is an attempt at a simple correlation with
22 UTQG ratings. And again we do not see a
23 correlation here.

24 The same is also true on page 27, the
25 price. We don't see a strong correlation in

1 price. We're looking at very low R2 correlation
2 coefficients here with price. It's a question of
3 whether or not you can expect to get lower rolling
4 resistance with increasing the tire price, it is
5 not true.

6 Going on to page 28. Similar results
7 with tread depths. We are not seeing a simple
8 layer correlation with tread depths.

9 Now the charts you have seen where we
10 have attempted to make correlations have involved
11 the entire body of the size populations that were
12 examined. There was quite a bit of additional
13 work that has been conducted and reported within
14 the project where individual studies were made
15 within speed ratings. Because speed ratings and
16 the concomitant changes made within the casing of
17 the tire to achieve speed ratings may indeed
18 influence rolling resistance on one hand. On the
19 other hand, our attempts to draw correlations
20 within individual speed ratings were also not
21 successful. Not simple layer correlations.

22 Again, nowhere in the project has
23 multiple correlation analyses been used.

24 If I may, Ray, I'd like to go on to page
25 30 and talk briefly about the results of the tire

1 size impact study. And this is the portion of the
2 body of the work, of the body of rolling
3 resistance testing that was set aside to look
4 specifically at size, attempting to keep many
5 other parameters common when the tires were
6 examined. So we should be on page 30.

7 MR. TUVELL: Okay.

8 MR. LAMBILLOTTE: Page 30 shows a
9 ranking of tires. Some work was done ranking the
10 tires also with the main body of testing that I
11 have already discussed. It is impossible to
12 depict that in an individual image so you'll have
13 to examine the report. But this piece of the
14 work, the tire size impact study where we're
15 looking at a 140 tire total population for this
16 sub-program, I can show you a ranking of the
17 sizes.

18 And I want to raise the issue of rolling
19 forces and rolling resistance coefficients again.
20 If you now have a range of significantly different
21 tires sizes and you now have a range of
22 significantly different tire weights and outside
23 diameters and indeed a range of significantly
24 different loads on the tires you can see a
25 difference depending on whether you are rank-

1 ordering tires according to rolling forces or
2 rolling resistance coefficient.

3 So it is important as we proceed and it
4 is important as you're interpreting rolling
5 resistance data to understand what type of rolling
6 resistance data you're looking at. We were able
7 to factor out this issue when we looked at the
8 main body of testing because within each
9 individual size we were able to use a single
10 loading on the tires. But now you have to be
11 sensitive to this issue.

12 And the reason for that, if you look at
13 page 30 and go on to page 31 they don't correlate.
14 You don't see an identical rank ordering of the
15 tires when you're looking at rolling forces versus
16 rolling resistance coefficient. But this shows
17 you, these two charts show you pending on which
18 aspect you're using, which approach you're using,
19 how the rank ordering would be for this tire size
20 impact study.

21 Keep in mind also as we talk about
22 results and we go on and we look at more results
23 of the tire size impact study we're looking at a
24 single manufacturer's single design in the market
25 place, an all-season design. So hopefully some of

1 the major issues that we could not study, for
2 example in terms of tire architecture and perhaps
3 body compounding. And that may be dry-compounding
4 also. In the first portion of the study, and this
5 study, we would expect more things to be in common
6 with that single, individual entry in the
7 marketplace and looking at 28 different sizes in
8 that entry.

9 Let me go on to page 32. The question
10 now is, if we look at a broad range of different
11 tire weights can we make simple correlations now
12 with rolling resistance? And here as we look at
13 the rolling forces. Now we're on page 32, Ray.

14 MR. TUVELL: Yes.

15 MR. LAMBILLOTTE: We see stronger
16 correlations now. In looking, for example, on
17 this page it's tire weights versus rolling
18 resistance. We're starting to see R2, that gives
19 us some measure of confidence that it seems there
20 is a correlation there.

21 If we go on to page 33 we can look at a
22 similar correlation with outside diameter, simply
23 outside diameter. Again we're talking
24 correlation, we're not talking pure cause and
25 effect relationships. We're simply looking at it

1 from a correlated standpoint at this stage.

2 I'm going on to page 34. We also wanted
3 to look at the maximum load on the sidewall. This
4 was not much of an issue to the way that we
5 conducted the work in the rest of the study, the
6 Task 4, that we talked about in terms of looking
7 within the individual two sizes. here we care a
8 lot about this kind of thing because we have a
9 whole range of tire sizes and load capabilities
10 within a single entry in the market. Here we're
11 looking at the relationship between max load, the
12 rolling forces, and again we're seeing strong,
13 linear correlations here.

14 Going on to page 35. A different way of
15 looking at the load again. on the tire, the load
16 index. This is all the information that we
17 gleaned off the sidewall of the tire. We
18 correlated that again to rolling resistance forces
19 and we're seeing a strong correlation. And that
20 was page 35, Ray.

21 MR. TUVELL: Okay.

22 MR. LAMBILLOTTE: If we look at page 36,
23 this is simply reiterating what I have just
24 mentioned. That is that if we look at a single
25 entry in the marketplace within a broad range of

1 sizes that are available and we measure those
2 rolling forces. We can start seeing some simple
3 correlations for some of these very simple, easy
4 to interpret aspects of the tire, that the
5 individual that is entering into the marketplace,
6 which is the person replacing passenger tires, can
7 perhaps relate to.

8 We saw pretty good correlations with
9 rolling forces and you saw that data. I did not
10 show you the correlations to the rolling
11 resistance coefficient data but those R2 values
12 are listed there. They're lower but we still saw
13 some measure of correlation there with the rolling
14 forces.

15 I'd like to go back a bit and we'll just
16 speak with some text in terms of our findings of
17 the work. You've seen the data. Let's talk in
18 terms of discussion of the findings, briefly. We
19 can now go to page 38, Ray.

20 MR. TUVELL: Okay.

21 MR. LAMBILLOTTE: Page 38. I'm not
22 going to read these numbers to you but they give
23 you an idea of the distributions on the histograms
24 of the rolling forces that were depicted at the
25 beginning of the discussion of the data. And we

1 saw the range for the 15-inch tires went from 7.5
2 pounds to 12.7 pounds. What does that mean? That
3 means in looking at those rolling forces we saw a
4 range such that the lowest values were about 40
5 percent below the highest values for the 15-inch
6 tires.

7 In looking at the 17-inch tires we
8 measured rolling forces ranging from a little over
9 13 pounds to over 22 pounds. So what does that
10 mean to us? Well, it's kind of a similar result.
11 We saw that the highest values for the 17-inch
12 tires, the 22.8 pounds, the lowest values were
13 about 40 percent lower again. So that's the kind
14 of distributions that we saw, the range of rolling
15 resistances that were available in the marketplace
16 as far as replacement tires go within these two
17 bodies of tires, these two sizes. Going on to
18 page 39, Ray.

19 MR. TUVELL: All right.

20 MR. LAMBILLOTTE: I want to just provide
21 ourselves of this vision of the average consumer
22 going into the marketplace to purchase tires.
23 It's really very simple. He's not a tire expert.
24 Simple tire characteristics to rolling forces.

25 As far as looking at the large body of

1 work that was done and looking, concentrating on
2 the two individual sizes we could not draw a very
3 real simple linear correlation for the rolling
4 forces. As I mentioned, we were using the same
5 loads on the populations of tires within an
6 individual size so that same statement would hold
7 also for the rolling resistance coefficient.

8 If we really want to look for
9 relationships we would have to go on to much more
10 complex aspects of the tire which were out the
11 relevant work that was conducted so we'd have to
12 indeed get into the tire architecture and perhaps
13 issues like historetic or energy loss
14 characteristics of the compounds in the tread, and
15 perhaps not only the tread but also the body of
16 the tire.

17 And a number of other issues we'd have
18 to investigate if we wish to perhaps go on and
19 create genuine and more viable correlations. And
20 of course these capabilities and the tools for
21 these capabilities are outside of the realm of
22 capabilities of understanding of the average
23 consumer that is wishing to purchase replacement
24 tires in the marketplace.

25 If we can go on to page 40, Ray.

1 MR. TUVELL: Okay, Bruce.

2 MR. LAMBILLOTTE: Briefly on the tire
3 size impact study. This is a description of the
4 range of rolling forces there. We saw a wide
5 range here also. Again we had a broad range of
6 sizes and a broad range of weights, a broad range
7 of other tire characteristics. We saw better
8 correlations, as I mentioned.

9 But we must recognize that if we're
10 looking at rolling forces and we're rank ordering
11 according to rolling forces, and/or we wish to
12 rank order with rolling resistance coefficients
13 those two do not yield identical rank orders, they
14 yield a very different rank order.

15 Going on to page 41. Again, we're still
16 talking about the tire size impact study. We did
17 see stronger correlations with very, very basic
18 fundamental aspect of the tire with rolling forces
19 and also with rolling resistance coefficient. But
20 we must recognize here that we were looking at
21 significant differences. Comparing significant
22 differences in tires as compared to our original,
23 larger body of work where we were looking at
24 smaller differences and simple characteristics
25 like weight and outside diameters. We were

1 looking within individual sizes.

2 So that's a very quick overview. I
3 tried to give you some kind of a rough idea of
4 what we found in this very large body of work. It
5 would be impossible for any single researcher to
6 draw every relevant conclusion from such a large
7 body of work. And as I've mentioned, we expect
8 there to be ongoing studies by probably a number
9 of parties into this. But I tried to give you a
10 reasonably quick and accurate depiction of what
11 came out of the study from a results standpoint
12 and what we felt was a relevant finding.

13 And at that point, Ray, I will turn it
14 back to you.

15 MR. TUVELL: Thank you very much. So
16 we're open for questions.

17 PRESIDING MEMBER BOYD: Comments or
18 questions from folks in the audience?

19 Well, we don't -- Either everyone has
20 studied this over and over and over again and
21 understands it completely or is swamped in all the
22 data. No one is rushing to the microphone here in
23 the audience so I thank you very much.

24 Ray, do you have any comments or
25 questions?

1 MR. TUVELL: No, no additional
2 questions. Not from staff at this point.

3 PRESIDING MEMBER BOYD: I'm going to
4 turn it over --

5 MR. TUVELL: Jim, I would defer to you
6 on decisions regarding what time we would break
7 for lunch today.

8 PRESIDING MEMBER BOYD: Well according
9 to the agenda we have three more speakers and then
10 aa staff presentation so maybe now would be a good
11 time to take a break until about -- We have no
12 more people who are going to present --

13 MR. TUVELL: Yes, no more remote
14 presenters, everyone else is here.

15 PRESIDING MEMBER BOYD: -- remote
16 presentations. Okay, that's fine.

17 All right, then I think we should take a
18 lunch break until 1:15. We'll pick up with the
19 next item on the agenda, with Michelin.

20 (Whereupon, the lunch recess
21 was taken.)

22 --oOo--

1 AFTERNOON SESSION

2 MR. TUVELL: All right, we'll reconvene
3 the workshop.

4 The next speaker on our agenda is Mike
5 Wischhusen. He has served as director of
6 industrial standards and government regulations
7 for Michelin North America since 2002. He is
8 responsible for Michelin's interactions with
9 state, provincial, federal regulatory agencies on
10 product performance issues in Canada, Mexico and
11 the United States as well as with industrial
12 standards organizations.

13 In addition Mr. Wischhusen serves on
14 several committees which coordinate corporate
15 positions and reactions globally on product
16 performance issues. His prior work includes
17 serving as director of product marketing for
18 Michelin North America's Small Tire Division as
19 well as an engineer in the tire design and
20 analysis function. Mike.

21 MR. WISCHHUSEN: Thank you and good
22 afternoon. Thank you for the opportunity to speak
23 this afternoon and to respond to your request for
24 information relative to Michelin's recent Green
25 Meters event.

1 My comments this afternoon are all
2 excerpted from the media kit that you have in
3 front of you. So what you'll get is a synopsis of
4 the information that was presented to the public
5 on the 30th of October.

6 As a responsible citizen Michelin seeks
7 to build awareness among people around the world
8 of the contribution that Michelin green energy
9 saving tires can make to the environment.

10 That's because choosing the right tire
11 can have a significant impact on the environment.
12 This is especially important today when experts
13 agree that road transport is a major source of CO2
14 emissions, one of the greenhouse gases responsible
15 for global warming.

16 Fully aware of this challenge, Michelin
17 has made the design of green energy saving tires a
18 key component of our innovation strategy. So that
19 consumers may integrate green criteria into their
20 choice of tires Michelin wanted to highlight the
21 impact of tire choice on fuel consumption and on
22 the environment. This was the mission of the
23 Michelin Green Meters event.

24 Now for a brief overview of the actual
25 event. In each of four cities around the globe

1 for a period of time the Michelin Green Meters
2 displayed estimates of, first, the worldwide fuel
3 savings attributable to Michelin green energy
4 saving tires compared to conventional tires on the
5 road since 1992 when we introduced low rolling
6 resistance technologies. That number almost 2.4
7 billion gallons of fuel.

8 Secondly, the ever increasing fuel
9 savings thanks to Michelin green energy saving
10 tires currently on the road today, a number of
11 11.6 gallons per second worldwide.

12 In addition, the amount of CO2 not
13 released into the atmosphere since the
14 introduction of green energy saving tires in 1992,
15 25 million tons. And the amount of CO2 not
16 released into the atmosphere, updated at a rate of
17 more than 240 pounds per second worldwide.

18 Michelin green energy tires include a
19 variety of passenger car, light truck and
20 commercial truck tires, optimized for fuel economy
21 by reducing their rolling resistance and weight
22 without compromising other key performance factors
23 such as traction, grip and tread wear. Reducing
24 rolling resistance also reduces CO2 emissions.

25 Michelin has long been committed to

1 better mobility, meaning mobility that is
2 sustainable for the planet and society over the
3 long term. Thanks to Michelin's Green Meters,
4 drivers will now have a better understanding of
5 the environmental consequences at stake when they
6 choose tires for their vehicles.

7 An aggressive commitment to reducing
8 tire energy consumption has guided Michelin
9 throughout its history. The increasing importance
10 of this challenge is illustrated by the fact that
11 the world's estimated 830 million vehicles, which
12 are responsible for 18 percent of the global CO2
13 emissions, is expected to double by 2030. With
14 its green energy saving tires Michelin is
15 demonstrating its concern for preserving energy
16 resources.

17 An aggressive commitment to reducing
18 tire energy consumption has guided Michelin
19 throughout its history, as evidenced by
20 significant technological contributions to the
21 reduction of rolling resistance.

22 For example, in the 1940s the
23 development of radial tires, which instantaneously
24 reduced rolling resistance by about 25 percent.
25 Again in the early 1990s with the introduction and

1 the widespread use of silica as a filler. Another
2 25 percent reduction in rolling resistance was
3 possible.

4 Today further advances are still
5 possible. Researchers at Michelin believe that
6 significant, additional reductions in rolling
7 resistance and weight of tires of up to 50 percent
8 are possible within the next 10 to 15 years, a
9 technical challenge to which Michelin is
10 responding with special research projects.

11 Michelin green energy saving tires
12 continue to deliver value to the passenger car and
13 light truck market in North America.

14 In the United States where the corporate
15 average fuel economy standards have been enforced
16 by the National Highway Traffic and Safety
17 Administration since the 1970s Michelin has
18 supported its vehicle manufacturer customers in
19 reaching these CAFE standards with low rolling
20 resistance tires that do not compromise other key
21 performances such as traction and wet handling.
22 These tires are also available in the replacement
23 market.

24 CAFE standards are focused on improving
25 the fuel economy of passenger vehicles, which in

1 turn lowers CO2 emissions. In both original
2 equipment and replacement tires Michelin offers
3 consumers fuel efficient tires that save money and
4 help protect the environment.

5 Michelin also provides environmental
6 technologies developed for truck tires. For
7 commercial trucking fleets the cost of fuel and
8 tires can be 25 percent of the total operating
9 costs. This accounts for millions of dollars each
10 year that translate into higher shipping and
11 retail costs for you and I.

12 This is why Michelin transferred its low
13 rolling resistance technologies introduced in 1992
14 for passenger car tires to truck tires in 1994.
15 While the average passenger car in North America
16 travels approximately 12,000 miles a year, a long-
17 haul truck can rack up that same number of miles
18 in a month and one fleet can have hundreds or even
19 thousands of vehicles, resulting in millions of
20 dollars in fuel and tire costs.

21 At the same time energy costs are at
22 historic highs. Diesel fuel has more than doubled
23 in the United States over the last five years and
24 it has increased in Europe by 40 percent over that
25 same period. Fuel is second only to labor costs

1 for trucking fleets.

2 With these factors in mind tire
3 performance and fuel economy are not only major
4 environmental concerns but major financial issues
5 for the trucking industry. The right tire choice
6 can be the difference in profitability for a
7 trucking company.

8 On the regulatory and legislative
9 fronts, by being here today Michelin is
10 demonstrating its commitment to actively work with
11 the Energy Commission and other members of RMA to
12 help develop and implement regulations to fill the
13 requirements of Assembly Bill 844, already passed
14 by law into the State Legislature requiring the
15 development of a rolling resistance grading system
16 for tires sold in California.

17 In the United States Congress Michelin
18 is aggressively supporting a pending role in
19 resistance legislation that would require NHTSA in
20 consultation with the Environmental Protection
21 Agency to devise and implement consumer
22 information programs to give consumers at the
23 national level for the first time the ability to
24 know and compare rolling resistance performance
25 characteristics at the point of sale.

1 This rolling resistance information
2 translates directly into fuel economy and will
3 allow consumers to choose the most fuel efficient
4 tires for their vehicles.

5 Michelin's effort to introduce energy
6 efficiency grading is motivated by the benefits it
7 would provide to consumers as well as by the
8 company's commitment to protect the environment.
9 This can make the consumer's choice in replacement
10 tires an act of responsible, environmental
11 stewardship, since in addition to providing
12 overall fuel cost savings low rolling resistance
13 tires are also lower in CO2 emissions that
14 contribute to global warming.

15 Thank you again for allowing me to speak
16 this afternoon. I'd be happy to answer any
17 questions about the Green Meters event.

18 PRESIDING MEMBER BOYD: Thank you very
19 much. I want to commend you and Michelin for your
20 active role in this area and for the comments you
21 just made. You kind of make our case for us so I
22 appreciate it very much.

23 Any questions for Michelin?

24 Well, then keep up the good work.

25 MR. TUVELL: All right, moving right

1 along. Our next speaker is Tracey Norberg. She
2 is the senior vice president and deputy general
3 counsel of the Rubber Manufacturers Association,
4 the national trade association of the tire and
5 rubber manufacturing industry, headquartered in
6 Washington DC. Tracey.

7 MS. NORBERG: Thank you very much. I
8 think this podium is ideally made for someone
9 taller but hopefully everybody can see me. I
10 apologize for not having a more complete bio but I
11 have been involved in this issue pretty much since
12 the conception here in California.

13 I think 2002 was our first meeting out
14 here and really I think been involved in every
15 event since. So I am very pleased to speak with
16 you today and to share with you our perspectives
17 of the tire industry moving forward on this issue
18 and hopefully some positive messages that can
19 encourage future action.

20 These are our member companies just
21 represented graphically by their logos. We have
22 eight tire member manufacturing members. And
23 criteria for membership in our organization is
24 that they need to manufacture tires here in the
25 United States. They are not necessarily all US-

1 based companies but are companies that manufacture
2 here in the United States and have US corporations
3 that represent them in our association.

4 And I will say by point of reference,
5 seven of those companies are here today with me.
6 And certainly if anyone has questions that I can't
7 answer or you'd like to hear an industry
8 perspective they are here as well.

9 Just to sort of summarize what we are
10 going to present here this afternoon. I just want
11 to lay it out all on one slide and hopefully
12 solicit some dialogue.

13 We support moving forward with the
14 rating system and consumer information program
15 that is captured in AB 844. We feel that the time
16 is now to get to sort of the meat of the
17 discussions and move the issue forward.

18 Certainly the testing that was conducted
19 in the last couple of years by Smithers forms a
20 good foundation to be able to look at how do we
21 characterize the market and how do we begin
22 looking at how to create a rating system.

23 We have been involved in an effort over
24 the last several months to try to collect
25 additional data from our member companies to

1 supplement what the Smithers data shows us. And
2 we've begun to analyze that data and I'd like to
3 share that with you today and begin that
4 discussion.

5 To sort of round out the test methods
6 discussion from this morning, we support use of
7 the SAE 1269 single point test and we'll talk
8 about that a little bit more in detail in a
9 minute.

10 Just to share with all of you here
11 today. I think for those of us who have been
12 involved in this issue for a number of years
13 sometimes you forget sort of the thing that
14 brought you here in the first place. We, a couple
15 of months ago in our group decided, let's take a
16 look at the legislation. You know, go figure,
17 read the legislation.

18 You know, it was a good sort of memory
19 check for all of us to say, you know, what is this
20 about, where are we going, and really what can the
21 statute tell us about what our direction should
22 be. So I just want to spend a few minutes talking
23 about 844 and hopefully that can guide the rest of
24 the discussion that I put together to share with
25 you.

1 AB 844 has the two basic sort of
2 sections, consumer information and the performance
3 standard and related requirements. And our
4 understanding was that this workshop was primarily
5 to focus on the consumer information portion of
6 that law and those are, I think, primarily where
7 the slides I have prepared focus today.

8 So to look at the consumer information
9 section for a minute. And this is just sort of my
10 shorthand summarizing what the statute says.
11 Basically, to develop and adopt, first a database
12 of a representative sample of tires sold in the
13 state based on test procedures adopted by the
14 Commission.

15 And based on that database, develop a
16 rating system of energy efficiency of tires sold
17 in the state.

18 And then based on these test procedures
19 and the rating system then to come up with
20 requirements for manufacturers to report the
21 energy efficiency of tires.

22 So just in pictures, the big ticket
23 items. We've got the test procedure, the
24 representative database, the rating system and the
25 reporting requirements. And from our perspective

1 we would, we would say that at this point we I
2 think have agreement on test procedure, although
3 that needs to be formalized. We have put together
4 information that can form the representative
5 database. We're at step three, really, which is
6 the rating system. But I'll go over all four of
7 those and sort of give our perspectives on those
8 as we discuss it.

9 First of all, step one, select a test
10 procedure. We had some dialogue earlier this
11 morning so I don't want to beat a dead horse here.
12 But basically we represent SAE J1269 as the single
13 point test that's appropriate for work here on AB
14 844. And we believe that the correlation work
15 that was conducted as part of the Smithers testing
16 did a good job of validating that. It found that
17 the tests were highly correlated between the more
18 simply 1269 test and the more complex 2452 test,
19 which is used primarily for vehicle modeling by
20 car manufacturers.

21 But I did -- I think we had some
22 reference this morning to the global test method.
23 Just to give you sort of, reiterate a perspective.
24 There is a global test method that is being
25 developed by ISO now. The tire industry is very

1 active in this area. A number of the gentlemen I
2 have with me today are on the committee and
3 working hard towards completing that test. As
4 Mike Wischhusen mentioned earlier, it's on an
5 accelerated schedule and we're expecting, you
6 know, at the earliest adoption will be in 2009.

7 We would support when that test is
8 completed a migration from the SAE 1269 single
9 point test to the ISO test method. But in no way
10 are we proposing any sort of delay or anything
11 like that until that time. There are ways to
12 correlate data between the two tests and that
13 should not be a barrier in using the 1269 test
14 method data to build the foundation for developing
15 the rating system and consumer program.

16 And, you know, we commit at this point
17 to keep everybody in California apprised of the
18 developments at ISO and sharing those results when
19 they're available. And just for a point of
20 reference too. That group right now has been
21 involved in looking at lab-to-lab correlation and
22 trying to understand variations in testing actual
23 test equipment and trying to get at some of the
24 issues that we faced in the industry. They're I
25 think doing very aggressive and active work that

1 hopefully will benefit the whole process.

2 Okay, so step two, establishing a
3 database of tires. As I mentioned, we do have the
4 data that was developed as part of the CEC/
5 Smithers testing work available in sort of the
6 general domain at this point. There are other
7 data sources that have been historically
8 available, the Ecos/Greenseal data that came out
9 in early 2003, and then the NRC report data.

10 We have, as I mentioned, collected data
11 from our members and intend to supplement the
12 currently available data with data from over 600
13 additional tires.

14 I wanted to add a little bit of sort of
15 flesh around how the CEC project came to be to try
16 and help those that may be newer to this issue
17 understand what that testing can do for trying to
18 characterize the marketplace.

19 Back in 2004 our group worked very
20 closely with Arnie Ward, who was the staff
21 director of this issue at the time, to develop a
22 testing program to utilize the \$400,000 that was
23 made available from the waste board to try to come
24 up with the beginnings or the outline or the
25 framework of what a representative database would

1 look like.

2 So to so that we looked at the most
3 popular tire sizes that the industry documents and
4 we also looked at the most popular vehicles in
5 California. The two tire sizes that were selected
6 represent the two top selling vehicles in
7 California in their tire size category and they
8 are also in the top of the most popular tires sold
9 in the United States.

10 So the smaller tire that you heard
11 discussed earlier, the P195/65R15 goes on the
12 Honda Accord, the Toyota Corolla. And these are
13 cars that are very, very popular, not only in
14 California but nationwide.

15 And then the larger tire, the 265 tire,
16 is the standard size for the Ford F-150, a variety
17 of different Chevy products, Dodge, Cadillac
18 Escalade. You can see the list. So these are
19 tires that are broadly found on vehicles.

20 And the idea was to come up with one
21 size that was on the small end of things and one
22 size that was on the large end of things to start
23 understanding what the parameters of the
24 marketplace were in terms of size.

25 And then to supplement that they tested

1 tires all along that continuum so that you had
2 sort of -- let's see here -- as you can see here,
3 two broad ranges of tires and two sizes on the
4 outside, or close to the outside of the tire size
5 availability and then one that went all the way
6 across the marketplace. And this is just a
7 graphic to show you the size distribution and the
8 tire lines tested by CEC.

9 We believe that this really forms the
10 basis to start developing that representative
11 database, which is the requirement in AB 844. And
12 as I mentioned, that data can then be supplemented
13 with tires in other sizes to come up with, what
14 does the marketplace really look like.

15 So if you can see on this graphic we
16 have got the tire sizes that were tested in CEC.
17 And then in purple on the second slide you can see
18 the additional tire lines that we have compiled
19 data for. So you can see we're starting to
20 understand much more of what the marketplace looks
21 like across a broader range of sizes.

22 And I will say, what I'm trying to
23 hopefully do in talking this afternoon is to try
24 and tie up a lot of the discussion we heard this
25 morning to say, we've got a lot of data sources

1 out there, got a lot of stuff out there. How do
2 we tie that up? How do we make something that
3 makes sense to move the regulatory process
4 forward?

5 So just to quickly address the other
6 data sources I had mentioned. We have the Ecos
7 and Greenseal data, which the NRC Report found
8 didn't have complete enough information to really
9 use in their analysis so we haven't included them
10 in our analysis either. But it's a pretty small
11 database at this point.

12 There is also the database that is in
13 the NRC Report and those tires were supplied by
14 our member companies -- the data was supplied by
15 our member companies and they are actually
16 included in the 600-some tires that we have
17 compiled as well.

18 So what do we do with all this stuff?
19 Basically the grand scheme here is that in order
20 to characterize a representative database you need
21 a number of ingredients. First you need all of
22 the testing data, the rolling resistance
23 coefficient data for all the tires. You need
24 other descriptive information about the tires.
25 And then you need industry data on the size

1 popularity of tire shipments. Which our
2 association collects and makes available to the
3 public each year.

4 And then in addition to that, to verify
5 that it reflects the California marketplace. We
6 need to review the California vehicle registration
7 data to assess the popular vehicle models and the
8 appropriate sizes for those models.

9 And lastly, and really the most
10 important step, is to use statistical modeling to
11 characterize the tire marketplace in terms of
12 rolling resistance. And the idea is to get us
13 beyond saying, gee, what does the marketplace look
14 like for the P195/6515 and say, what does the tire
15 marketplace look like. And through statistical
16 modeling you can do this.

17 And in fact we've embarked on this
18 effort. We've retained an environmental
19 consulting firm to begin looking at this for us
20 using statistical methods so that we can
21 understand what does all this data mean, what does
22 the marketplace look like and how do we develop a
23 rating system.

24 So to show you some of the work that our
25 consultant has done. This slide here shows the

1 cumulative probability of rolling resistance
2 coefficient values. It says at the top that this
3 is based on the CEC replacement data only. And I
4 will hasten to say this is not the CEC data. What
5 this is is modeling based on that data to
6 characterize the marketplace.

7 Basically I think you've seen other
8 people earlier show kind of a normal distribution
9 curve and this is a cumulative curve. So you
10 could show it in a normal distribution. That's
11 not what this is. But it's basically the same
12 kind of curve where we're seeing, you know,
13 cumulative probability as rolling resistance
14 coefficient values increase.

15 And then with the additional data that
16 we've compiled we get more certainty and more
17 confidence in our curve. And you can see that the
18 curve changes a little bit but you can understand
19 I think a little more clearly what the marketplace
20 actually looks like.

21 So what about tire efficiency ratings?
22 What do they need to do? And from our perspective
23 what they need to do is be meaningful to
24 consumers. I think the last thing any of us want
25 to do is to go through all this effort and no one

1 uses it, no one cares. It's a lot of effort and a
2 lot of resources and expense for the industry and
3 also for government and it just doesn't serve
4 anybody's purpose.

5 So it needs to be meaningful and it
6 needs to be easily understood by both buyers and
7 sellers. And that's a quote out of the TRB
8 report. It's really key.

9 How do you do that? You need a limited
10 number of rating categories. You know, 9,000
11 categories tells someone nothing. So we're, I
12 think, looking more at, you know, a more
13 reasonable level. Four, I think, has been
14 commonly discussed and to us that seems like a
15 reasonable level although we're certainly open to
16 dialogue.

17 And we need literature that explains all
18 this stuff to people so that they understand what
19 does this writing mean and what does it not mean
20 for them, their needs and their vehicle.

21 We think this is an area ripe for
22 statistical analysis. We're not complete with our
23 analysis yet. We certainly want to share that and
24 use that as part of the dialogue. But this is
25 really where the policy dialogue needs to be right

1 now.

2 I will say, while I'm focusing right now
3 on consumer information and the rating system,
4 earlier this morning we heard a lot of talk about
5 linear regression analysis and comparison of
6 various tire parameters. And I think Smithers
7 made the point that there aren't linear
8 relationships among tire characteristics.

9 I certainly am not dismissing any of
10 those concerns but I really think kind of keeping
11 our eye on the prize here and focusing on ratings
12 right now and consumer information is the first
13 step. Certainly there will be a lot of dialogue
14 on relationships and the use of multi-regression
15 analysis to understand how tires are designed and
16 how the various characteristics relate to one
17 another. But at this point we'd like to focus on
18 the rating system and we believe that this is the
19 time to do it.

20 So I think I've kind of walked through
21 how to look at the ratings. The next question,
22 step four is, develop a tire efficiency reporting
23 system. What do you need to do there? And coming
24 back to the statute again, which I have to tel you
25 is a great read. It actually makes sense. And it

1 says, you know, the reporting should be based on
2 the rating system. So that tells me, we've got to
3 have this rating system.

4 And tire manufacturers need to report
5 those ratings to the Energy Commission. We are
6 comfortable at this point reporting ratings to the
7 Energy Commission. We would also integrate that
8 into the well-established process and information
9 flow that happens during the tire marketing sales
10 process. So we are very, very open to providing
11 uniform tire quality grading to customers through
12 distribution chains and we would anticipate that
13 continuing for this new information.

14 We'd also look at, from our industry's
15 perspective, how we can provide the rating
16 information on websites. Whether it's individual
17 websites or industry websites or whatever. We
18 think that that would be a helpful component and
19 are interested in exploring that.

20 And then we would be looking for all
21 federal performance standards and information
22 requirements that we would self-certify data and
23 then be open to periodic audits to assure
24 compliance. And certainly I also would say that's
25 probably an area where there will be discussion

1 but just in this summary I'll kind of leave it at
2 that point for reporting.

3 I wanted to give everybody kind of a
4 flavor of what is also happening at the national
5 level and to let all of you understand where we
6 stand as an industry when it comes to consumer
7 information on energy efficiency, really,
8 nationwide.

9 RMA and all of our member companies
10 support federal legislation that would establish a
11 consumer information rating system and information
12 program at the federal level, so nationwide. This
13 provision was included in the past version of the
14 energy bill. It was also included in the House-
15 passed version of the new energy bill, son of
16 energy bill, that was passed yesterday.

17 The bill is under consideration in the
18 Senate today. I think the Senate will be having
19 ongoing policy discussions throughout the weekend.
20 There are some hitches, none to do with our
21 provision, but hitches on other aspects of the
22 energy bill that will be probably resolved behind
23 closed doors in Washington this weekend.

24 But that gives you an overview. We're
25 really trying to advocate that this be done on a

1 national scale.

2 Of interest to California, the federal
3 legislation does include a preemption provision
4 and the industry's intent was never to preempt
5 what California is accomplishing here but instead
6 try and prevent other states from developing
7 information that would be duplicative and
8 confusing for consumers.

9 We truly believe that consumers would
10 benefit from information that makes the most sense
11 and is the most consistent. And multiple consumer
12 information programs that do different things just
13 don't get you there when it comes to a consumer.
14 So we did try and look at preemption from that
15 perspective.

16 At this point, potentially, there could
17 be two rating systems being developed out here at
18 CEC but also through NHTSA. And we believe that
19 consistency between these programs will ultimately
20 benefit consumers. You know, if you have one
21 system with four stars and another system with
22 colors and another system with letters or whatever
23 it doesn't tell consumers anything different, it
24 just looks confusing. To us that doesn't achieve
25 environmental goals. We want people to understand

1 what their choices are to be able to make them.

2 So just so we're clear. My goal really
3 in coming out to California on a very irregular
4 basis to work here with all of you is also to try
5 and marry up what's happening on the federal
6 level. So to the extent that there's not
7 disagreement, that we could do something
8 consistent. And even if there is disagreement,
9 that we could have dialogue and look ultimately at
10 trying to provide consumers with meaningful
11 information and that makes sense. And I think we
12 hopefully all share that goal.

13 I did want to mention a little bit about
14 what is happening in Europe because I think there
15 was some mention of it earlier. Certainly down
16 the road if we want to talk more in-depth about
17 Europe we're happy to do that but in this summary
18 it is difficult to accomplish everything.

19 In the EU the European Commission is
20 also developing tire efficiency ratings and
21 consumer information. Our companies are global
22 companies. They're all actively involved in this
23 issue. And what we're looking at is if there are
24 synergies among California, this national approach
25 and EU systems we'd certainly be interested in

1 having a dialogue on that and maximizing the
2 effectiveness of any information provided.

3 So our recommendations for moving
4 forward. Number one, adopt the single point SAE
5 test. You know, call it good, we've got a test.
6 Let's move on with that.

7 Use the data that has been developed as
8 part of the Smithers program plus this additional
9 data that we've collected to characterize the
10 marketplace.

11 And then begin this formal dialogue
12 among stakeholders to develop the rating system.

13 Establish a rating system so that
14 manufacturers can begin providing information to
15 consumers.

16 And then establish a reporting
17 mechanism.

18 And that's where we are as a tire
19 industry. I'm happy to answer questions and I'm
20 happy to roll up our sleeves and begin the
21 dialogue.

22 PRESIDING MEMBER BOYD: Thanks, Tracey.
23 I appreciate hearing all you've had to say. As I
24 said at the beginning of this hearing, I had a
25 feeling we'd come a long way in the last few

1 years. A question. Well, and first let me say,
2 we'd obviously love to continue to work with you
3 and your folks. And I see the benefits and the
4 merits of harmonizing not only in the country but
5 throughout the world if that be possible.

6 Do you have any idea of what a federal
7 timetable might be to address this issue if they
8 are given legal authority to do so? Presuming
9 passage of the legislation.

10 MS. NORBERG: I think that's the biggest
11 hurdle right now. Because as you're probably
12 aware, this provision is tied up in the larger
13 energy bill. Our provision is not controversial.
14 There are a lot of things in the energy bill that
15 are very controversial so the big goal now is to
16 get a bill out of the House and Senate that the
17 President will sign.

18 PRESIDING MEMBER BOYD: I appreciate
19 that was an impossible question to answer.

20 MS. NORBERG: I think the bigger
21 question with NHTSA is certainly we hadn't really
22 begun that dialogue with them because we need
23 legislation first. But our message to NHTSA would
24 be the same things we've shared with you now. We
25 have a test method, we have a database. Let's

1 rate tires and, you know, develop that program. So
2 we'd be looking to move forward as expeditiously
3 as we can.

4 PRESIDING MEMBER BOYD: Everything you
5 say makes academic, excellent sense. As I've
6 relayed to you before, a dilemma always for the
7 nation/state of California in these areas is, and
8 this is one where maybe serendipitously we've had
9 more patience, is the inability to wait for the
10 federal government to move, it seems like in
11 practically everything we do. So I hope
12 harmonization is possible.

13 I don't think we can necessarily wait
14 for harmonization if it is not probable in the
15 very near term but, you know, it makes sense to
16 strive for all those goals and objectives.
17 Perhaps we and Europe can harmonize and influence
18 the rest of the United States but who knows what
19 the dialogue may be.

20 MS. NORBERG: You know, I would say
21 looking at 2007 I don't know in 2003 that we would
22 have anticipated being in Congress and questioning
23 who would have a program first. And really, you
24 know, in 2003 I might have thought I would be in
25 Congress asking to adopt California's rating

1 system.

2 But, you know, we are where we are and I
3 guess, you know, from the perspective of the eye
4 on the prize and looking at the consumer
5 interests. We'd really, you know, like to have
6 programs, you know, both in California and
7 federally that make sense and give consumers that
8 information. I will say that the bill itself has
9 a two year implementation schedule. It actually
10 asks for promulgation within 24 months.

11 PRESIDING MEMBER BOYD: I guess another
12 dilemma I have, based on now decades of working in
13 government, is for some strange reason the federal
14 government agencies just have a tough time
15 adapting or adopting something that California
16 did. We run the risk of differing programs but we
17 all will strive to see that it is the same.

18 That is if we get past the lowest common
19 denominator dilemma, just to any kind of a
20 program. Let's see what we can do. I appreciate
21 the forthright presentation and the desire to work
22 together and let's see what we can do. I am not
23 coming back for a third term. I want this to be
24 on this term, in any event.

25 MS. NORBERG: How long do we have?

1 PRESIDING MEMBER BOYD: I may not even
2 stay the duration of my second term. Any
3 questions? I see a question.

4 MR. OLSON: Hi Tracey. Tim Olson,
5 California Energy Commission. I wonder if you
6 could comment on the percent of sales that your
7 members provide US-wide and in California and also
8 comment on foreign sales. So meaning, if you're
9 going to supply data your database, does it not
10 include some of the tire manufacturers?

11 MS. NORBERG: Sure. Our member
12 companies represent over 90 percent of the tires
13 that are sold in the United States. Of that 90
14 percent it is not all tires manufactured in the
15 United States. Our companies are global so many
16 tires they sell are manufactured in other global
17 facilities. So we do cover a large portion, a
18 vast majority of the tire marketplace.

19 But there are tire companies that aren't
20 members of ours. There are a couple of Korean
21 companies that do not have manufacturing in the
22 United States that also provide data to us so that
23 90 percent figure does include their product as
24 well. And that's Kumho and Hankook.

25 But there are a number of Chinese tire

1 companies, over 200 tire companies I think in
2 China at this point, that do sell tires in the
3 United States. And those would be a segment of
4 the market we don't cover at this point. Did that
5 answer your question? Okay.

6 PRESIDING MEMBER BOYD: Any other
7 questions, comments? Thank you, Tracey. Alan.

8 DR. MEIER: It's Alan Meier. And
9 Tracey, thank you, it was very useful. I had a
10 question about the data, the RMA data. Because I
11 guess we've had the Smithers data for a year.

12 MS. NORBERG: You've had the Smithers
13 data for a year, we just got it in July.

14 DR. MEIER: All right, okay, it's been
15 out -- I'm sorry, I'm exaggerating. But when will
16 we be able to see the RMA data? Is that
17 available?

18 MS. NORBERG: We are undergoing analysis
19 right now on quality. You know, QA/QC of that
20 data. But our intent is to provide it to the
21 Energy Commission.

22 DR. MEIER: Would it be appropriate also
23 to add in some of the European data or Japanese
24 data or Australian data or anything like that?

25 MS. NORBERG: The bill in California

1 really focuses on tires sold in California so
2 information about tire products sold in other
3 regions is really not applicable here.

4 DR. MEIER: But in terms of establishing
5 a label, for example. If you're harmonizing a
6 label or a rating system with Europe then wouldn't
7 you want to know what the whole spectrum is? Many
8 of the cars are essentially the same, aren't they?

9 MS. NORBERG: We were really focused,
10 you know, on the legislation here in California
11 and what it is looking at is tires sold in the
12 state of California.

13 DR. MEIER: Okay. Well I'm just trying
14 to think about insuring that we have a robust
15 label that can handle changes in the future so we
16 don't have to completely revise it. I know, for
17 example, that the Europeans are having trouble
18 with their A through G label because they've
19 created these bins that may be too narrow, given
20 the uncertainty in the measurement procedure. One
21 measurement lab could say this is a B tire but
22 another measurement lab would say this is a C, or
23 worse, even a D tire.

24 So I'm trying to look a little bit
25 forward so we don't have to redo this whole thing

1 later on and that's why I'd like to try to
2 incorporate as much data as possible to make some
3 sort of --

4 MS. NORBERG: You know, I think in
5 California we're constrained by the legislation
6 which says, tires sold in California. But in
7 terms of a broader perspective you do bring up a
8 point that is certainly something you have to
9 consider, which is that tire markets are different
10 globally.

11 So when we're looking at harmonizing
12 programs, the extent to which they can be
13 harmonized really depends on what the marketplaces
14 are in those regions and whether they are similar
15 enough that harmonization makes sense.

16 I think that's part of the ongoing
17 dialogue. In the slide I said, synergies. I'm
18 not saying they have to look exactly the same.
19 They shouldn't look exactly the same but it is
20 part of that process.

21 DR. MEIER: Okay, thank you. Actually I
22 do have another question. Do you have any
23 viewpoints on what a label might look like for a
24 tire?

25 MS. NORBERG: I think, again, if you

1 look at the California legislation it specifically
2 says, it gives kind of examples of website
3 information, brochures and point of sale
4 information. So that's the kind of information
5 that we support, which would be the point of sale
6 type information or web-based information.

7 So when you say label, I think label
8 means different things to different people. In
9 our view, and really the view that I think -- We
10 haven't heard anybody disagree with this when it
11 comes to actually when you go buy a tire you don't
12 see a label on the tire. It's typically ripped
13 off by the guy putting the tire on your car and
14 you don't read it. So the idea of actually
15 sticking a sticker on the tire may not communicate
16 the information we're looking at communicating to
17 consumers. The technician sees the sticker and
18 it's gone.

19 So really the point, you know, our point
20 of view is that point of sale information at the
21 counter with the tire dealer that is selling the
22 tire and on the internet prior to the sale would
23 help provide consumers with information.

24 DR. MEIER: And I guess finally, I was
25 asked this question and I squirmed uncomfortably.

1 How effective do you think a label will be?

2 MS. NORBERG: I think you need to look
3 at what you're trying to affect. If you're trying
4 to change every consumer's mind about everything,
5 go watch somebody buy a refrigerator. Somebody
6 looks at the sticker with the energy information
7 and then the next guy is looking at whether his
8 coffee cup fits in the thing, you know, or whether
9 they like how the ice maker works.

10 Everybody looks at different things when
11 they buy every product and that's just reality.
12 So we're trying to convince every person to do one
13 thing. I kind of hope not, you know. I like
14 diversity in the marketplace. But are we trying
15 to influence manufacturers? I think that that is
16 really the more salient question.

17 This industry has provided information
18 on tire parameters for 30 years, give or take, for
19 uniform tire quality grading. And those grades
20 themselves have caused intense competition within
21 our member companies, certainly, and caused them
22 to increase performance on those performance
23 categories, independent of what consumers think
24 one way or the other.

25 So, you know, are you trying to

1 influence the market or the marketplace or the
2 consumer? I think it's worth really looking at
3 that. For example, on the uniform tire quality
4 grading, the traction grades. Initially when
5 those grades were adopted we had A, B and C. Well
6 good luck trying to find a C graded tire now.

7 Basically NHTSA had to create another
8 category, a AA, because tire traction performance
9 had improved so significantly that A, B and C
10 weren't really appropriate anymore, we needed AA,
11 A and B. So that's the kind of competition that
12 we see in this industry and where information can
13 really work.

14 I actually recently had a conversation
15 with a former NHTSA person about this. And they
16 see that even in the car companies, the crash
17 ratings, for example, and the NCAP program. It
18 creates competition among companies to improve
19 performance. So effectiveness I think is an
20 interesting question and one that I think we don't
21 want to look to broadly about what we consider to
22 be effective.

23 DR. MEIER: I came running up here when
24 you started talking about refrigerators again
25 because I had a graduate student who pretended and

1 actually did sell refrigerators for awhile just to
2 watch how people responded to the label. This is
3 the energy guide label.

4 And the amazing thing he discovered was
5 that about 30 percent of the people who saw the
6 label misinterpreted the label to see that -- The
7 big number was the energy use but 30 percent of
8 the people thought the big number was energy
9 savings. So 30 percent of the people were trying
10 to get the wrong result. So this is one reason
11 labeling, the rating system is very important.

12 And then you mentioned the wear problem
13 where they had to develop a AA.

14 MS. NORBERG: Yes, it was traction.

15 DR. MEIER: Traction, excuse me. Which
16 tells me that that was a label system that was a
17 mistake. That was poorly --

18 MS. NORBERG: Absolutely not.

19 DR. MEIER: No, no, no, excuse me.

20 MS. NORBERG: Absolutely not.

21 DR. MEIER: A poorly designed label
22 system because a consumer doesn't automatically
23 know that there is an A. If they think they're
24 getting an A they may not know there is a AA.

25 I mention this only because Europe had

1 the same problem with their A through G labels for
2 refrigerators. Sorry I keep referring to
3 refrigerators but there are some good stories
4 there. The European Government, the Commission,
5 decided rather than re-categorize all the labels,
6 set it down, they created an A+ and an A++ grade.
7 And the consumers would go in and they think
8 they're buying -- if they're buying A they think
9 they're buying the top and they don't realize that
10 there's an A+ and an A++.

11 And from a consumer perspective that is
12 a poorly designed labeling system. It's because
13 the government did not recalibrate the whole
14 labeling system when they discovered that there
15 were all these much higher quality units up above.

16 And this is something -- This is not a
17 criticism of you or anything, it's just that we
18 have to think hard about how to make a rating
19 system or a labeling system that is flexible
20 enough in the future to accommodate the
21 improvements. And I can assure you, we're going
22 to see huge improvements in rolling resistance and
23 we want to make sure that we don't have this A,
24 AA, AAA kind of problem again in the future.

25 MS. NORBERG: You know, I think that

1 those are really important dialogue points when we
2 -- once we've got kind of, you know, the
3 categories for a rating system. You know, what do
4 we call them. Sure, I think we probably all have
5 a lot of input that would be valuable.

6 I would say that in AB 844, and even in
7 the federal legislation too, there is a review
8 provision built into the legislation. So as the
9 marketplace changes those are the kinds of
10 questions that definitely should be explored.

11 DR. MEIER: I hope you're right. I'm
12 just pointing them out now. This is the time to
13 start thinking about these things.

14 MS. NORBERG: Honestly, Michael in
15 sharing the traction example was not really to
16 debate A or AA or whatever you want to call it.
17 It was really to show you that information does
18 drive innovation and we've seen that in our
19 industry.

20 DR. MEIER: And I agree.

21 MS. NORBERG: So anyway.

22 PRESIDING MEMBER BOYD: Any other
23 questions? If not, thank you, Tracey. Thank you
24 very much.

25 MS. NORBERG: Thank you.

1 MR. TUVELL: All right, we're ready for
2 our final speaker in the first session and that is
3 Luke Tonachel.

4 Luke is a part of the energy and climate
5 team of the Natural Resources Defense Council's
6 San Francisco office where he works as a clean
7 vehicles and fuels policy analyst. His work
8 focuses on reducing global warming pollution and
9 US oil dependance through policies that promote
10 advanced vehicle technologies and cleaner, more
11 sustainable fuels.

12 Prior to joining NRDC Luke directed
13 product development at a San Francisco software
14 company and served as a nuclear engineering
15 officer in the Navy. He holds a master's in
16 public policy from the University of California at
17 Berkeley and a bachelor's degree in mechanical
18 engineering from the University of Rochester.
19 Luke.

20 MR. TONACHEL: Thank you, Ray. Good
21 afternoon, Commissioner Boyd, advisors, staff.
22 Thanks for the opportunity to come here and speak
23 with you today.

24 You know, one of the things that the
25 federal energy bill, as we all know it has an

1 important clause in it for increasing the fuel
2 economy of new vehicles.

3 And one of the things that is exciting
4 about the potential for fuel efficient tires is
5 that they are actually an improvement that we can
6 see on that existing stock that is out there. We
7 don't have to wait for the 15 years for the
8 vehicle fleet to turn over for that improvement.
9 So that is just something to keep in mind as to
10 part of the importance of being able to put
11 forward a technology like this and be available to
12 all those cars already on the road. Hopefully
13 though that they won't always be stuck in traffic
14 like that.

15 I'd like to start off with a little
16 discussion that, you know, puts a little bit of a
17 California perspective on what we're doing here
18 today. Of course we know AB 844 is driving the
19 efforts here in California and we also know that
20 we've got a little bit of a slippage in the time
21 scale. And Commissioner Boyd, I appreciate your
22 opening comments today and we look forward to
23 seeing sort of a schedule of how we're going to
24 complete the requirements of that bill.

25 Also it's important since the passage of

1 that bill back in 2003 to think about what are the
2 other major policy drivers here in California.
3 And of course we have decreased oil dependence
4 that are statutory or state targets through AB
5 2076, which I guess would have been maybe before
6 the Nation's bill. The 2007 IEPR, the recent
7 Alternative Fuels Plan. Also reduction in
8 greenhouse gas emissions. We know that we have a
9 cap in the state on greenhouse gas emissions and
10 tire efficiency is a piece of the actions that are
11 expected to achieve some of those reductions.

12 We just talked a little bit about the
13 national tire efficiency program. And I just want
14 to point out that while a tire efficiency program
15 at the national level is an information program,
16 California's program goes a step further and
17 actually establishes minimum efficiency standards.

18 Mike Wischhusen talked a little bit
19 about the Michelin Green Meter program. That is
20 an example of where there's industry leaders
21 moving forward with trying to get this information
22 out to consumers. That they say that they've got
23 a product, they can already deliver savings and
24 trying to get information to consumers about how
25 they can achieve those savings with those

1 purchases.

2 I mention Yokohama here just because I
3 was impressed by a display that I saw at the auto
4 show down in LA back in mid-November. They have
5 their new -- it's a tire, I believe it is only
6 sold in Japan but they had it there on a Prius.
7 This tire is a new energy tire that is striving
8 for a better ecological balance in the way it is
9 made. So they are using less petroleum in the
10 production, they are using natural rubbers and
11 they are using citrus oil.

12 But there was another display along with
13 the tire and that was where they had this sort of
14 what looked like a roller coaster, the bottom of a
15 loop of a roller coaster, and they had two balls
16 of two different tire materials. They put them
17 next to each other on this track and then they
18 rolled them back and forth. And basically the
19 point was that the materials that they were using
20 in these tires lowered the rolling resistance and
21 you could see it. You could see obviously the one
22 with lower rolling resistance kept on rolling.

23 So while that's only a Japanese tire
24 today it is in the marketplace and certainly shows
25 some of the technical potential. So what I would

1 like to see, obviously with all this momentum, is
2 that California keeps that momentum going.

3 And Commissioner Boyd, just as you were
4 saying, we can't wait necessarily for a federal
5 program. We need to take on the leadership that
6 we have here with this program and keep it, and
7 keep it moving.

8 Just to quantify specifically what kind
9 of benefits could we see here in California. You
10 know, a typical tire is on a car for three to four
11 years. The NAS study said that 80 percent of
12 vehicles on the road have replacement tires.
13 Somewhere in that range, 75 to 80 percent.

14 The tire program within California
15 requires that there's no, you know, adverse impact
16 on scrap tires, which means that the technology
17 solutions that are put in place to achieve rolling
18 resistance, and this is something going back to
19 Dr. Pottinger's presentation, need to avoid a
20 reduction in wear but they need to keep what
21 customers currently expect for wear. So that
22 would lead me to expect that tire wear would be
23 maintained over the life of the tire.

24 So taking some of those assumptions in
25 place, and I looked at the 2020 benefits. And the

1 reason I looked at the 2020 benefits is that it
2 gives time for the market to evolve and also 2020
3 is when that cap for greenhouse gases exist within
4 California. So here are some of the numbers.

5 You know, just with a two percent
6 increase in fuel economy, and two percent would be
7 probably achieved with a ten percent reduction in
8 rolling resistance. The NAS report said one to
9 two percent so it's in that range. And I also put
10 up two and three and four percent because I think
11 that there's quite a bit of opportunity here for
12 technological advancement. So these are the
13 gasoline savings in millions of gallons and the
14 greenhouse gas savings.

15 You know, just taking a look at those
16 numbers, if you think of the Pavley greenhouse gas
17 fuel -- tailpipe standards, those are expected to
18 achieve something on the order of 30 million
19 metric tons by 2020. So this is only about a
20 tenth of that. But if you take this in context of
21 other measures that are being considered as part
22 of the climate action team you realize that they
23 are considering measures that are well below one
24 million metric ton in savings by 2020. So this is
25 a -- it's still a significant amount of savings

1 with regard to meeting the state goals.

2 As I've mentioned several times, in
3 terms of where I see or my thinking on where --
4 actually I shouldn't say it's my thinking, it's
5 the thinking of other reports on where the
6 technology can go.

7 The NAS reported that there was already
8 a 20 percent change in rolling resistance among
9 the tires that are out there that they looked at,
10 which would lead to about a four percent increase
11 in fuel economy.

12 We heard earlier today the Smithers data
13 had about a 40 percent range.

14 Then there's a couple of quotes here and
15 I appreciate Mike's earlier presentation. I
16 pulled out some quotes from the press kit that he
17 talked from. And he mentioned this first quote,
18 basically where they see opportunities for up to a
19 50 percent improvement in fuel economy -- I'm
20 sorry, in rolling resistance. That 50 percent, as
21 it's noted here in this lower quote, if you got a
22 50 percent increase in rolling resistance
23 performance then you could get as much as a ten
24 percent increase in fuel economy.

25 That means that with innovation, which

1 appears to be already being worked on within
2 companies, we could see much bigger numbers than
3 what I have even thrown up there for potential
4 greenhouse gas reductions.

5 Now from a consumer perspective there
6 doesn't appear to be any debate these days that
7 this is really a cost-effective way of achieving
8 fuel consumption reductions for the consumer. And
9 this \$2 per year cost for low rolling resistance
10 technology is something that comes again out of
11 the NAS report.

12 So I applied that to what kind of fuel
13 savings you would get with a two to four percent
14 increase in fuel economy. And you can see in all
15 cases your net savings in a year is anywhere from
16 \$20 to \$45 there for something in the order of a
17 \$2 per year expense. So easily cost-effective.

18 And you can see that my assumptions are
19 in there and I accounted for an increase in the
20 fleet fuel economy over time.

21 PRESIDING MEMBER BOYD: Do you think
22 we'll ever see \$2.50 gasoline?

23 MR. TONACHEL: So the reason I used that
24 is because if you look at an IEA forecast, which
25 is more pessimistic than the EIA forecast, the EIA

1 says that in the 2020 time frame, actually I think
2 even in the 2030 time frame, that you're closer to
3 \$2.10 a gallon. The IEA had it somewhere around
4 \$2.50 a gallon. That's obviously very
5 conservative.

6 PRESIDING MEMBER BOYD: In our recent
7 projections we gave up on both of them and used a
8 higher number.

9 MR. TONACHEL: Well even with a low
10 number you can see you save plenty of money.

11 PRESIDING MEMBER BOYD: A point well
12 made.

13 MR. TONACHEL: There was just a
14 discussion about, you know, what is the impact of
15 standards. I'm just using this slide as an
16 illustration of really what we're overall trying
17 to achieve here. And if you look, the dotted line
18 here is representative, is there to represent the
19 normal distribution of rolling resistance among
20 tires in the OE market. It's obviously a smaller
21 market, a lower number of tires sold.

22 Whereas the solid line represents the
23 replacement tire market, obviously with a higher
24 recognized higher rolling resistance. And also we
25 didn't see it in the Smithers data that was

1 reported today, it is recognized that there is a
2 difference between the OE market and the
3 replacement market in terms of average rolling
4 resistance.

5 So what is our goal here? And I set up
6 some buckets. You know, these are just meant to
7 be illustrative of potential rating buckets.
8 Maybe you need more, maybe you need fewer. Of
9 course there could be different types of labels on
10 them. With the labeling system we're hoping that
11 we have manufacturers starting to compete and that
12 causes a shift towards a better rolling resistance
13 performance in the replacement tire market.

14 And then eventually through the
15 implementation of the California program you
16 establish a minimum efficiency standard and that
17 essentially would cut off the low leg on the
18 replacement tires. And that could also force a
19 shift, a further shift towards better efficiency
20 performance.

21 So again back to this question of how
22 much does the label do or just the rating system
23 do? Well I think to really achieve the savings
24 that I've estimated here we need both. We need a
25 rating system and ultimately we need the standards

1 as well.

2 Okay, I want to close this brief
3 presentation with just a few design principles.
4 Alan already mentioned some things that we're
5 going to have to be thinking about as we go
6 forward and design this program. I wanted to go
7 through some other thoughts and some are related
8 to those.

9 You know, fundamentally we want to
10 protect the industry leaders. Those companies
11 that get out there and provide these products. We
12 want to make sure that they get credit for the
13 more efficient products. In other words, other
14 products can't come along and use a label that
15 would confuse the issue where they don't justify
16 having that label.

17 And we also -- You know, that's not only
18 to protect the industry leaders but it is also
19 there to protect the consumers, right? So that
20 they're actually getting what they think they're
21 getting. So we have to assure data accuracy.

22 We also have to make sure that we have a
23 standardized procedure, that I think everybody
24 here agrees with, goes across all the
25 manufacturers products and it looks like J1269

1 might be a good candidate for that.

2 And of course it needs to be precise.

3 We need to define exactly what sort of, what level
4 of precision we need out of that test and how well
5 it can be repeated.

6 I think we also need to explore the idea
7 of an independent third party lab doing the
8 analysis and making sure that those labs that are
9 responsible for doing that analysis have the
10 proper certification. And we'd have to define as
11 a group what that proper certification was.

12 The next point here, rating and testing
13 system sustainability. I'm using that term
14 sustainability to reflect the fact that this
15 program needs to take on a long life that maybe
16 goes beyond what funding has been currently
17 allocated towards a California program. In other
18 words, we want this to live long beyond what it
19 takes to get the program in place.

20 We need to have -- So we have to have
21 ongoing analysis that is well-funded to keep
22 pulling in the new data and checking its accuracy
23 to maintain the database. And then also to go out
24 there to do random testing of products to make
25 sure that they're meeting the standard or the

1 label that they've achieved.

2 Fundamentally we need labels that are
3 easy to understand. Everybody agrees on that
4 point. They're useful to customers. And I agree
5 that it should be both for point of sales but also
6 a label that is available for pre-sales research
7 so people can get on the web and compare tires
8 before they even go into a tire store.

9 This system should also have a challenge
10 process so that this is analogous to energy
11 efficiency programs that are already out there
12 such that manufacturers can compete against each
13 other if they feel that somebody has
14 inappropriately provided a rolling resistance
15 value that they don't think is valid for the tire.
16 They could test it on their own or have somebody
17 test it and then there would be a whole challenge
18 process to go through there.

19 And finally there is going to need to be
20 a high degree of dealer education in addition to
21 education of consumers through the label. And I
22 add on here that there's also an opportunity for
23 the state to be educating their fleet managers and
24 the fleet procurement officers.

25 My last slide is that we should leverage

1 existing programs out there to do this. There are
2 models that we can take a look at that may serve
3 as a way of kicking us off and sort of laying the
4 administration foundation for doing this. This
5 one example that I provided, the Cool Roofs Rating
6 Council, and you can see the website there. This
7 is an independent, nonprofit organization.

8 It does I think receive funding through
9 the industry but it has oversight. And that's
10 key. It needs to operate as a separate entity and
11 have public interest oversight to make sure that
12 it's, you know, turning out verifiable, repeatable
13 and accurate data that the public can trust.

14 So that is what I had as a presentation,
15 thank you. Any questions?

16 PRESIDING MEMBER BOYD: Thanks, Luke.
17 Questions? Susan.

18 ADVISOR BROWN: Yes, I had a couple,
19 Luke. If you wouldn't mind going back to slide
20 five on the fuel savings estimates.

21 MR. TONACHEL: Yes.

22 ADVISOR BROWN: The incremental cost you
23 quote, isn't that per tire, the \$1 to \$2?

24 MR. TONACHEL: That's actually -- In the
25 NAS report it's \$1 to \$2 per year and they --

1 ADVISOR BROWN: But is it per tire?

2 MR. TONACHEL: Is it per tire?

3 ADVISOR BROWN: I thought it was per
4 tire. I just wanted to clarify that.

5 MR. TONACHEL: Well they put it in as a
6 per year cost, they didn't put it as an
7 incremental cost for buying the tire.

8 ADVISOR BROWN: Maybe subject to check.

9 PRESIDING MEMBER BOYD: But it seems to
10 me it would have to be per tire, otherwise we'd
11 have to multiply two by four to get four tires on
12 the ground for it to be a vehicle.

13 ADVISOR BROWN: I was just trying --

14 MR. TONACHEL: Okay, I'll go back and
15 check this but my understanding was that it was,
16 it was basically they looked at what was the cost
17 to buy a set of tires, incremental costs. You
18 know, other reports out there said incremental
19 costs to buy a set of four tires, you'd spend \$5
20 to \$12, right. And then you break that up over
21 the four year life of the tire, then that's in the
22 order of \$2 a year.

23 ADVISOR BROWN: Okay, now I've got you.
24 And the fuel economy improvement estimates, Luke.
25 That's on the vehicle, right? I'm just looking at

1 your chart again.

2 MR. TONACHEL: That's the fuel economy
3 improvement of the vehicle itself.

4 ADVISOR BROWN: Of the vehicle, okay.

5 MR. TONACHEL: And you can see that I
6 used the almost 25 miles per gallon vehicle and
7 it's a two percent increase from that.

8 ADVISOR BROWN: Okay, thanks.

9 MR. TONACHEL: Any other questions?

10 PRESIDING MEMBER BOYD: No other
11 questions? Thanks very much, Luke.

12 If I am not mistaken, Ray, that ends
13 this particular section. I have only one blue
14 card up here from a member of the public and this
15 might be an appropriate -- or a stakeholder I
16 should say. It might be an appropriate time for
17 that to occur. Terry Leveille of the California
18 Tire Dealers Association. Did I get your name
19 right?

20 MR. LEVEILLE: You sure did. Thank you
21 very much, Commissioner Boyd and advisors and
22 staff. Terry Leveille. I represent -- I own the
23 firm TL and Associates and represent the
24 California Tire Dealers Association. We have two
25 chapters, Northern California and Southern

1 California.

2 And they asked me to appear today. I
3 did provide Ray with a letter from them. But I am
4 not going to read the letter. I just want to
5 raise a few points here that I think are pertinent
6 coming from the California tire dealers. And
7 these are basically independent guys and women.
8 They represent probably 600 to 700 tire dealers
9 throughout the state of California and they are
10 kind of the bottom line of where we see the
11 potential for AB 844 coming to roost.

12 And while the focus is, as Tracey said,
13 primarily the rating system and that type of
14 thing, the bottom line for the tire dealers is
15 concern about the item in the bill on the energy
16 efficiency program that would require replacement
17 tires to be as effective and energy efficient as
18 original equipment tires. As far as they are
19 concerned that is a major concern of theirs.

20 They foresee or they see the potential
21 of a mandate coming down in the state of
22 California that they cannot sell tires that are
23 less energy efficient than original equipment
24 tires, even if that eliminates the ability of the
25 consumer for choice. And that is their primary

1 concern.

2 We look at consumers as when they come
3 into the tire shop as looking at the factors of
4 tire longevity, price and safety right now.
5 Adding fuel efficiency is fine. We more than --
6 We don't have a problem with that as long as the
7 state does not mandate certain tires cannot be
8 sold in California.

9 There is a variety of problems that we
10 have outlined in our letter that would cover that
11 but we see some real innovations. And I think
12 that the Michelin and the Yokohama experiences are
13 two of the ones we've seen lately that have been
14 very encouraging to the tire dealers. And we hope
15 that that continues and it broadens with other
16 tire manufacturers as well. We are very
17 supportive of that.

18 At the same time we are very supportive
19 about providing greater information on fuel
20 efficiency to the customers. That being said, we
21 want to maintain the customer's ability to make a
22 choice in that tire. And our major concern is a
23 fear that somehow down the line that that choice
24 will be somehow abrogated. We just wanted to
25 convey that once again. We've done it before and

1 we do it once again and we'll probably do it in
2 the future. But thank you very much for the
3 opportunity to take our testimony.

4 PRESIDING MEMBER BOYD: Thank you and we
5 hear your message.

6 All right, Ray, that's the only -- is
7 there anyone else out there who wants to make a
8 comment of any kind at this point or we'll go on
9 with the published program?

10 All right, Ray, take it away.

11 MR. TUVELL: All right. I want to talk
12 a little bit about the implementation of AB 844
13 but I also want to do a little additional
14 housekeeping here. First off, many of you
15 received written copies of the notice for this
16 first workshop meeting. And what I want to
17 announce, that will be the only written mail-out
18 that we intend to do on notifications.

19 So for the future what we would
20 encourage you to do is to take a close look at the
21 workshop notice. You will notice that it lists
22 that we have a website, and I am going to go to
23 that real quick here. If you go to that website
24 you will see our website for the tire program
25 specifically.

1 You will see on the left that we will be
2 providing you direct links to all the documents
3 that we have already. Certainly every
4 presentation presented today will be up on that
5 link -- up on the website soon. The presentations
6 as well as any public comments or anything
7 submitted to the docket.

8 Down here in particular is where I want
9 you to draw your attention. This is where you can
10 sign up for the ListServer. And if you do that
11 then you will be certain to get notifications of
12 all future workshops, everything associated with
13 the program. So you can take a proactive way to
14 do it like that or if you just put it on your
15 calendar to check our website every now and then
16 to see if anything new comes up you can do it that
17 way.

18 In the workshop notice we also mentioned
19 that we would like to get written comments
20 regarding today's workshop by no later than the
21 21st, okay. We view this as the opening of the
22 dialogue, the public dialogue on this program. So
23 many concepts or ideas that you've heard today,
24 presentations that you've heard today, certainly
25 things that I am going to be talking about, this

1 will be our first opportunity to have this open
2 discussion. Well clearly this isn't the end of
3 that opportunity for that discussion.

4 And most importantly, by giving you an
5 opportunity to digest a little bit of what you've
6 heard today and then respond to us in writing to
7 anything you've heard, as well as some questions I
8 am going to have, is going to be very, very
9 important to moving the process along. Okay.

10 All right. Now what I want to do is lay
11 out what I am going to say is a basic framework of
12 the considerations we're having on moving forward.
13 And I am saying this is a basic framework because,
14 in fact, in many cases we don't have a lot of
15 details yet and you will see that as we go in a
16 little further.

17 So we're interested in getting this
18 dialogue going with you to give us your input and
19 your ideas and your perspectives to help this
20 process along so we can work together to achieve
21 this common goal in the most efficient way
22 possible. We've talked a little bit about the
23 enabling legislation.

24 I guess one other thing I should say. I
25 want to introduce Caryn Holmes from the Energy

1 Commission staff. She will be the legal counsel
2 who is going to help guide us through the process.
3 Maybe it's appropriate, Caryn, that I have you
4 come up now and talk a little bit about, you know,
5 the process, the CEQA and to the extent we can and
6 the schedule before I launch into my slides.

7 MS. HOLMES: Good afternoon, I am Caryn
8 Holmes. I am the staff attorney that will be
9 working on the formal rulemaking portion of this
10 proceeding. I do not have a PowerPoint
11 presentation to make to you.

12 For those of you that haven't been
13 involved in rulemakings before, at the Commission
14 we typically divide them up into two phases. The
15 first phase is an informal phase where we have
16 meetings like this and there's a lot of give and
17 take. Through that process we develop what the
18 scope of the rule is and we start to work on
19 actual proposed language that would be formally
20 adopted by the Commission to implement the
21 program.

22 When the Committee gets to a point where
23 they feel that they are pretty close to a program
24 that they think is going to work and going to be
25 acceptable to the parties the formal process

1 begins. The informal process can last anywhere
2 from a month or two up to a full year, depending
3 upon the complexity and the number of parties.
4 How much disagreement there is about how the
5 program should be implemented.

6 Once the formal process starts the
7 Commission will have in place proposed language.
8 They will have in place a couple of supporting
9 documents that describe the rationale behind the
10 language that the Committee has selected. There
11 will be cost estimates associated with the
12 compliance and the various program elements.

13 These documents are formally published.
14 And that's the one exception to your rule about
15 the ListServer. Those get mailed. So we have to
16 have a mailing list for people so that we can send
17 out that particular notice. It would be helpful
18 if we could get that from people as well as the
19 e-mail addresses. It will only be used for the
20 formal process but it is an important element.

21 Once we start that formal process with
22 proposed language there is a 45 day public review
23 period. Any comment that a person or a party
24 makes during that comment period we respond to.
25 The Committee can decide to amend the regulations.

1 If they do so it's another formal process with
2 written notice of amendments. Another comment
3 period is established.

4 When that process is complete the
5 package goes to the entire Commission for
6 adoption. Once the package is adopted by the full
7 Commission there is a review process that actually
8 occurs at another state agency so usually it's the
9 staff attorney who pulls together a bunch of
10 documents and sends them over to this other state
11 agency called the Office of Administrative Law.
12 They take 45 days to review the proposed package
13 and the regulations either go into effect
14 immediately if there is an urgency need for that
15 or they go into effect 30 days after they are
16 approved.

17 The formal process -- It is very formal
18 so we like to have everything to the extent that
19 we can established and in place before we begin
20 that. This process where people are providing us
21 written comments and comments at the workshops
22 will be very important because the closer we can
23 get to a consensus about how this program ought to
24 be created and implemented the easier that formal
25 process will go.

1 I would be happy to answer any questions
2 about rulemakings. I suspect you'll all become
3 familiar with them for those of you who aren't
4 already before this is finished. Yes?

5 MR. TONACHEL: Luke Tonachel with NRDC.
6 Just to clarify, on the date. Once you move into
7 phase two and a document has gone out for public
8 review you said a 45 day comment period, review
9 and comment period. And if after that 45 days the
10 Commission votes to approve and it goes to OAL,
11 OAL only has 45 days to approve it?

12 MS. HOLMES: Yes, let me step back and
13 give a little bit more detail. It's a minimum 45
14 day review period. At the Commission it is almost
15 always more than 45 days just because of the fact
16 that the proposed regulations are always published
17 on a Friday and it is never exactly 45 days
18 between a Friday and a Commission Business
19 Meeting. So it's usually a little bit more.

20 And sometimes it can extend quite a bit
21 longer if there are comments and the Committee
22 decides that it wishes to make changes. Because
23 then there is another formal review process that
24 begins.

25 Once the Commission has adopted the

1 package it goes to the Office of Administrative
2 Law and the Office of Administrative Law is making
3 sure that we have complied with the procedural
4 requirements that have been established for
5 rulemakings. As well as they do sort of a broad-
6 brush review of whether or not the regulations are
7 consistent with the statute and have we used
8 appropriate language. There is nothing that is
9 confusing or ambiguous in the regulatory language.
10 That process takes what they call 30 business
11 days, which of course turns out to be roughly 45
12 days. Does that answer your question?

13 MR. TONACHEL: It did. It seems shorter
14 than the ARB OAL review so that's why I was
15 wondering.

16 ADVISOR BROWN: Caryn, I was going to
17 ask if you could give us a ballpark of what's a
18 typical rulemaking take. And by typical I mean a
19 non-controversial one.

20 MS. HOLMES: I've never been involved in
21 a non-controversial one. The shortest one I have
22 been involved in was about six months from
23 beginning to end.

24 PRESIDING MEMBER BOYD: Luke, that's
25 what would make this more like an ARB rulemaking.

1 I think we are all subject to the same time
2 limits, everything else under the Procedures Act
3 of California.

4 MS. HOLMES: That is correct, it is the
5 same. It's just that it frequently --

6 PRESIDING MEMBER BOYD: And depending
7 upon the -- depending upon the magnitude of
8 comments made on the final approval, that dictates
9 how long the legal staff has to spend reviewing
10 and commenting before submitting to OAL.

11 MS. HOLMES: That's correct. If
12 everything goes well we can submit that final
13 package to OAL within a couple of weeks. But if
14 we have 150 comments or more to respond to it will
15 be months before it goes over there. Their review
16 period may start significantly after the
17 Commission's adoption.

18 MR. TONACHEL: Thank you.

19 MS. HOLMES: Thank you.

20 PRESIDING MEMBER BOYD: Thanks, Caryn.

21 MR. TUVELL: All right. So we talked a
22 little bit about the enabling legislation, AB 844.
23 We had hard copies out here on the desk when you
24 came in and of course you can access that as well
25 as everything else through the website to look at

1 it in more detail.

2 I have done an over-simplification here
3 also, as everyone else has done today, in terms of
4 looking at it and breaking it down into its
5 fundamental components as we're reading it. And I
6 think it is highly consistent with what everybody
7 else has been saying. To: adopt a test protocol,
8 adopt reporting requirements, a rating system, a
9 database, and ultimately the consideration of
10 adopting efficiency standards subject to meeting
11 specified conditions.

12 And again, take a close look at the bill
13 and become familiar with it. I agree with Tracey
14 completely. If you haven't looked at it lately
15 you wouldn't remember all the details it goes into
16 and it goes into significant detail.

17 I want to talk a little bit about the
18 applicability of it, of 844 also, so we all have a
19 common framework here. It applies only to
20 passenger vehicle and light duty truck tires
21 manufactured for sale in California.

22 There are some very specific exemptions
23 in 844, which I have listed here. Again, I've
24 condensed the language. I encourage you to look
25 back at the more detailed explanation. But in

1 essence if 15,000 or less of a tire is made it is
2 exempt. Snow tires are exempt, motorcycle tires,
3 space-savers. You all recall that many vehicles
4 come with these very small tires intended for use
5 only as temporary spares. Tires less than 12
6 inches in diameter and off-road tires.

7 Now in some cases the legislation is
8 very detailed, in some cases it is not. So even
9 within those terms that I just shared with you we
10 view this as an area where we are going to have to
11 work together to make sure we have a common
12 understanding of exactly what those terms mean.
13 So for example something as simple as snow tires.
14 Well, we're going to have to nail down what a
15 definition of what a snow tire is. Unless you
16 folks in the industry have a common definition --

17 PRESIDING MEMBER BOYD: Should you every
18 say nail when it relates to a tire?

19 (Laughter)

20 MR. TUVELL: We don't want any flats
21 here. But the point is that where the legislation
22 did talk about such things as a snow tire we'll
23 need to define that. Because, again, we're
24 heading towards regulations here and the
25 definitions are going to be very important. So we

1 want your help and assistance in providing us with
2 the basis for these definitions. How do we make
3 these definitions very clear and commonly
4 understood, okay.

5 Do you have already within your industry
6 very clear definitions of these terms that you see
7 in 844 or the terms that we're going to have to
8 come to agreement with as we move forward on 844
9 that we can use, that are going to work for us
10 outstanding, okay.

11 Do we need more detailed definitions?
12 Please come forward with those also.

13 And let me focus on number four here for
14 a second. I probably didn't state this nearly as
15 clearly as I'd like. How many tires are we
16 dealing with? Distinctly different tires. I'm
17 not talking the volume of tires sold in
18 California.

19 But when we talk about the need to get
20 ratings systems that apply to all passenger
21 vehicle and light truck tires sold in California,
22 how many are we talking about for each
23 manufacturer? Is it 10,000, is it 20,000, is it
24 50,000? Help us come to grips with the size of
25 this so we can get a sense that in the case of

1 Michelin we're talking about X number of tires.
2 Distinctly different tires that would fall within
3 the category of passenger/light truck and for each
4 manufacturer so we can start getting our arms
5 around this thing, okay.

6 And I used the term also, family. Help
7 us with the understanding of that. I realize that
8 in many cases a tire manufacturer will manufacture
9 a product whose only difference is possibly the
10 name of that product. Then you would supply that
11 to one company as the Concord model X or the Atlas
12 Model C or something like that. So if that brings
13 the number of tires into a smaller category
14 because the only difference is the name of it we
15 need a better feel for that too, okay. So we need
16 your help in that area, please.

17 Let's talk a little bit about the Phase
18 1 goals. In the notice we talked about the
19 different phases the way we view 844 so I
20 encourage you to look back at that. Yes, it is
21 principally the information aspect of 844 as
22 Tracey pointed out so it's a similar thing. I'm
23 calling it Phase 1 but it is the information side
24 of 844.

25 We're looking at this as breaking down

1 into four separate components, you can say. Let's
2 look at the first one. Maybe we'll reach a
3 consensus today.

4 For a proposed rolling resistance test
5 protocol. I believe everybody I've talked to and
6 the sense I've gotten from the industry all along
7 is the J1269 force method, single point, standard
8 reference conditions. So now is the time that we
9 would like to get back from you your feeling of
10 that in writing. Yes, Don.

11 MR. AMOS: Why the force method?

12 MR. TUVELL: Well that was the method
13 that we used in the Smithers tests.

14 MR. AMOS: It's okay but there are other
15 methods that are just as -- Okay, Don Amos from
16 Continental Tire North America. The question was,
17 why specifically the force method for J1269?

18 MR. TUVELL: Sure. There may be a
19 misunderstanding on that, Don. In the case of --
20 in all of these, and I'll go over the questions
21 right now. Just please come forward with the
22 issues you have or the concerns or the areas of
23 clarification that we need to deal with on this,
24 okay. It doesn't have to be specifically the
25 force method.

1 MR. AMOS: Okay. The 1269 references
2 several acceptable methods.

3 MR. TUVELL: Yes.

4 MR. AMOS: Okay. So as long as we say
5 1269 and leave it go at that you could use, you
6 would be free to use whichever method you had,
7 your laboratory was equipped for.

8 MR. TUVELL: Well I think what I want to
9 entertain here is a dialogue where we can ensure
10 that in the end we're going to have consistent
11 results that we can compare from test to test to
12 test, whoever is doing the test, whichever method
13 they're doing it with.

14 MR. AMOS: Yes.

15 MR. TUVELL: So if somebody is doing the
16 force method or somebody is doing another, we need
17 in the end comparable information.

18 MR. AMOS: That is what the SAE has
19 already done.

20 MR. TUVELL: Okay.

21 MR. AMOS: That's why it's in the 1269
22 as a standard, because these things have been
23 compared that they are comparable.

24 MR. TUVELL: Okay.

25 MR. AMOS: They produce the same result.

1 MR. TUVELL: Okay, very good. So here
2 in the area then of the rolling resistance test
3 protocol are the questions that we would like you
4 to respond to: Is it acceptable or not, okay.

5 How do we ensure that the test results
6 from various labs and testing facilities are going
7 to be comparable? What steps are we going to have
8 to take to do that, okay?

9 What are the costs of getting these
10 tests conducted, okay?

11 And are there sufficient test facilities
12 and to what extent do they exist?

13 This is all information that we would
14 like you to be able to respond to us with
15 information on. We are not aware, for example,
16 the extent of testing capabilities within the
17 existing tire manufacturing industry or
18 independent labs. So this is an area where we
19 would really appreciate you in response to the
20 workshop today to provide us with additional
21 information.

22 MS. NORBERG: Ray, just a point of
23 clarification. Are you looking for comments
24 within two weeks on all of these questions or just
25 as part of the dialogue? Or are you expecting

1 dialogue today on all these questions? We're just
2 trying to understand what you expect.

3 MR. TUVELL: No, obviously. I mean, the
4 principal dialogue that I was interested in today
5 is that anything I can do to clarify the
6 questions. But I wasn't expecting to hear from
7 you today a complete response, absolutely not.
8 This is the first day that you have been
9 introduced to these.

10 We had set out December 21 in the notice
11 as the day we would like to get complete reaction
12 to today's workshop. Now if you don't believe
13 that is sufficient then I think you need to bring
14 that to the attention of the Committee and we can
15 discuss the possibility of additional time.

16 MS. NORBERG: I mean, just from the tire
17 industry perspective we really do want to provide
18 meaningful comments to this process. When we saw
19 in the notice that we were looking for written
20 comments on the workshop it's just very difficult
21 to prepare this in advance without questions.

22 I would just enter to ask to entertain
23 the idea of a little bit of extra time, especially
24 given that it is the holiday season. We are not
25 trying to delay by any means but certainly we just

1 want to not have the quality of information
2 provided short-circuited at all.

3 PRESIDING MEMBER BOYD: Point well-made,
4 point well-taken. If anybody has any comments on
5 an issue today that might help us resolve the
6 issue right here and now please spring to the
7 microphone, to the extent more time is needed or
8 time is needed to respond.

9 MS. NORBERG: Well maybe it would
10 helpful. I think at least from our perspective
11 there is consensus in the industry and there
12 sounds like there's consensus among other groups
13 that 1269 is the appropriate test.

14 I'm not sure the goal in collecting
15 additional information, you know, we'd be happy to
16 answer the questions. But if there is agreement
17 here today I'd suggest let's all agree to agree if
18 that would be a possible outcome of the
19 discussion.

20 PRESIDING MEMBER BOYD: That's fine by
21 me. I mean, I've already kind of heard that under
22 the umbrella of what is J1269 there are acceptable
23 protocols. It sounds to me like that question was
24 answered, unless I'm missing something.

25 The question of compatibility between

1 labs, I don't know. Does anybody have any comment
2 on that or is that a subject we should get some
3 written comments on?

4 And last but not least, any of the
5 issues that Ray is bringing up, which this is just
6 the staff bringing them up for consideration. If
7 any of these issues you decide, some of you decide
8 are fairly knotty and might deserve, you know, a
9 staff workshop of their own, please let us know.
10 If not today in some written submission.

11 Even I jumped at what are the test
12 costs. I even wrote in the margin of mine the
13 relevance of that. But I was reminded by Susan
14 that unfortunately in the rulemaking process we
15 have to give some indication of what we propose
16 costs folks. So I guess we will have to collect
17 some cost data of some form.

18 MS. NORBERG: I guess, if I can -- On
19 the issue of test protocol. When you go back to
20 the statute the test protocol is specifically
21 first mentioned when it talks about establishing
22 the database of a representative sample of tires.
23 So it seems to me at this point in choosing a test
24 method the goal is to be able to get to that
25 database.

1 And certainly once you commence the
2 final rulemaking there will be other pieces that
3 need to be added. But at this point at least if
4 we could make that threshold decision and move on
5 with, you know, creating that database, analyzing
6 the data, it would not slow the process down at
7 this point.

8 PRESIDING MEMBER BOYD: Okay.

9 MR. TUVELL: And I hope that none of
10 these questions I'm bringing up are viewed as ones
11 that would slow the process down, okay. But I
12 think that one of the points that I would like to
13 try to stress here is because we're talking about
14 ultimately getting into a rulemaking proceeding it
15 is not just a matter of us coming to an agreement
16 today and everything is fine and off we go.

17 We are going to have to nail down in
18 detail and with the detailed language necessary
19 exactly what is 1269 and any other detailed
20 qualifications we have to add to that so that the
21 rule is very, very clear. Otherwise it will be
22 rejected, okay. So I am bringing these things up
23 as this extra level of detail that we'll have to
24 nail down through the process.

25 But I don't see it as a show-stopper.

1 I'm not after a show-stopper.

2 MS. NORBERG: Yes, just a question too
3 on the sufficient test facilities question. I am
4 not sure if you're asking for overall compliance
5 questions. I'm not sure what the goal in that is.

6 MR. TUVELL: It's very simple. We would
7 like to know the test capabilities that exist,
8 okay. Is this going to be an issue or not? And
9 certainly we don't know in any individual company
10 your capability to do testing.

11 MS. NORBERG: Okay.

12 MR. TUVELL: I suppose I could do some
13 surveys to find out what exists in private
14 industry. Maybe that would be simpler. But to
15 know what your individual companies could do, I
16 think it would be easy for you to come forward.

17 MS. NORBERG: I think the difficulty is
18 you've got sort of the cart and horse program.
19 Sufficient test facilities. If we're talking
20 about how the industry currently does testing, you
21 know, for every federal requirement, for safety,
22 durability, consumer information, anything. It is
23 all self-certification where companies do their
24 own testing in their own labs.

25 So if that's what we're talking about,

1 the companies represented here either have testing
2 facilities or a 1269 in their own company or
3 contract out to a third party lab to do that
4 testing. So we have a combination of mostly
5 private facilities, private companies, that do
6 their own internal testing and there are two
7 companies in the country that do third party
8 testing. Smithers, which you used, and STL. So
9 it's pretty -- That's it, it's a pretty small
10 universe at this point.

11 MR. TUVELL: Okay.

12 MS. NORBERG: But I think, you know,
13 sufficiency is an interesting question because we
14 don't have a program established. So, you know,
15 sufficient to what is sort of an open question and
16 difficult to answer at this point.

17 MR. TUVELL: Well, please view this as
18 we're still at the information gathering stage,
19 okay. And that I don't -- Now is the time to ask
20 these questions and hopefully the information will
21 be coming straightforward.

22 I don't want to have to wait until we
23 have a, quote, program, to ask the questions and
24 to try to get a grasp of the information. And
25 that's the purpose of laying out the questions

1 today. And again, I apologize that we have not
2 had an opportunity to get these questions in your
3 hand earlier. So if we had not set aside
4 sufficient time for you to respond to them, again,
5 I mean, please give us a better indication of how
6 much time it would take.

7 MS. NORBERG: I would say sufficiency
8 would be difficult to tell you prior to
9 understanding what the program may contemplate.

10 MR. TUVELL: Well no. I mean, this is
11 more basic. It's kind of like -- Maybe it's my
12 choice of words here in this question number four,
13 sufficiency. What is the volume? I mean, how
14 many tires could be tested over what period of
15 time? Okay. Just so we get a feel of it.

16 PRESIDING MEMBER BOYD: Luke, did you
17 have a question? And there are other microphones
18 here. You're welcome to just grab a seat and sit
19 down. Tracey, maybe you'd better sit.

20 MS. NORBERG: Yeah, I'm in the hot seat
21 a lot.

22 PRESIDING MEMBER BOYD: You may be here
23 awhile.

24 MR. TONACHEL: Luke Tonachel from NRDC.
25 I guess I just wanted to -- I hope this is helpful

1 clarification but I guess what we should be
2 thinking about is not just, you know, what we need
3 here to establish a representative sample database
4 but also we need to get a sense of, if we get to a
5 point -- you know, when we get to a point that we
6 need to report this information for every tire
7 model that's out there. And Ray asked the
8 question earlier, how many tires does that mean.
9 That facilities are in place to do that.

10 So I guess the point I'm trying to make
11 is, let's not think about this just as what we
12 need to do to get the test database or the sample
13 database in place but what it is that we need to
14 do to actually, once we're in a reporting mode. I
15 don't know if that's helpful or a different
16 perspective from what you were coming from.

17 MS. NORBERG: Yes, I think that is
18 helpful. But I guess the challenge is what kind
19 of, what kind of reporting structure would it be
20 and what would be the requirements. Because
21 that's really hinged on whether or not the
22 capacity is sufficient.

23 PRESIDING MEMBER BOYD: I hear that
24 statement and what's going through my mind is that
25 this is an example of the kinds of questions

1 you're probably going to have to have a discussion
2 about as, you know, once a rule is roughed out to
3 some degree and you start having your dialogue
4 back and forth.

5 It may be very easy for you to, so to
6 speak, certify that we have adequate test
7 facilities to meet the deadlines and the criteria,
8 with respect to the criteria you were given,
9 you're suggesting, et cetera, et cetera.

10 I guess it's a fair question, I don't
11 know. Based on the discussions you've had here I
12 guess it's kind of simple, a simple question. And
13 I'll take Ray at his word as saying he's just
14 throwing out some of the questions that the staff
15 feels would have to be addressed in one form or
16 another in formulating and ultimately getting
17 approval of a regulation.

18 MS. NORBERG: And I think maybe it would
19 be helpful if we could sort of prioritize what
20 things might be subject to this 14 day comment
21 period that would help us get to the next step for
22 the next session in the dialogue, versus things
23 that might be more mid- or long-term information
24 needs. You know, we'd be happy to work with
25 everyone. But I think in terms of trying to look

1 at getting the process to move forward it would be
2 helpful to sort of prioritize and set time frames
3 so that the next time we meet we have the right
4 information.

5 MR. TUVELL: Well, could I then in turn
6 then request that from you. I mean, as part of
7 the comments that you would submit to us give us
8 your suggestions on prioritization.

9 MS. NORBERG: Absolutely.

10 MR. TUVELL: I'm wide open on all of
11 this stuff. I mean, if there is one message I can
12 get across, we are wide open at this point. There
13 is no sequence, you know, or order of this, you
14 know. The questions you could add more now, you
15 know, or whatever is necessary to get the
16 clarification, okay. This is the beginning of the
17 dialogue, the beginning of the process.

18 Okay, reporting requirements. At this
19 point it is our desire to get this level of
20 information on all the tires that would be
21 reported to us. Basically it is our general
22 belief that certainly up to this point this is
23 commonly available data that you have all the
24 time, okay. And it would only be this additional
25 data that would result from any testing.

1 So the questions that we have: Is, in
2 fact, is this commonly available data? Because
3 I'm concerned that we would be talking about here,
4 are we placing a burden on you in some way, shape
5 or form to develop information that you don't
6 already have.

7 Do you have some precedence on preferred
8 data reporting that you have used before in your
9 industry such as with NHTSA that could serve as a
10 good model for us? Do you already have this stuff
11 in a form that all you have to do is click the
12 button and send it to us when you send it to
13 everybody else? Great, I'm open to it. What do
14 you have that exists already?

15 And also, are there any foreseeable
16 reporting problems that need to be considered?
17 Now the concept that we have here is very similar
18 to the concept that we have with any appliance
19 reporting or anything else that re regulate where
20 we would establish a template that any company
21 subject to the regulations could get access to
22 electronically. You just drop the information
23 into the template, you e-mail it back to us. We
24 go through some basic reviews of the data, make
25 sure it's correct, it's complete. There may be

1 some interaction there.

2 At some point then we would accept all
3 the data as being, yes, this data is correct, and
4 then it would be made available in a usable form
5 for future use. Either for additional analysis,
6 distribution to anybody who wants it, use in an
7 interactive website. There's many different
8 concepts that we have and ultimately what would we
9 do with the data once we have it.

10 But right now my focus is getting your
11 feedback and your ideas and your suggestion on the
12 mechanisms by which we want to transfer this data
13 and also the data that we're requesting.

14 Rating system. It's unanimous. None of
15 us have a great idea yet on a rating system so we
16 don't have an idea where I'm saying, here is a
17 proposal on it. So I think we've all sort of, who
18 have spent time on this, stepped back and said,
19 this one we need to work closely together on
20 because it's not apparent yet that there is an
21 existing system out there that serves as a good
22 model. If you believe there is please share that
23 information with us.

24 Certainly this matter of consumer
25 friendliness. And I say consumer but I think it

1 was pointed out by others that there is a consumer
2 in the purchase decision, there is a seller in the
3 purchase decision. Both of them have significant
4 influence over that transaction.

5 So we're talking about the need to have
6 a rating system that makes that process work well
7 to get more of a focus on energy efficiency as a
8 consideration in the purchase decision. So the
9 seller is going to have to be comfortable with it
10 and how to transfer and provide that information
11 to the purchaser. The purchaser is going to have
12 to be comfortable with it in understanding what it
13 means, okay.

14 And I especially -- I've talked to a few
15 of you. I especially think that this one is one
16 where we're going to think long and hard about
17 this. Alan has talked about the concept of
18 labeling. And I think to some extent earlier
19 today when we were talking about this there was a
20 little bit of a semantical problem going on in
21 that some people were saying labeling, some people
22 were saying rating.

23 I look at it as the rating system is how
24 do you start talking? How do you translate the
25 technical information on energy efficiency into

1 some easily understood concept for consumers? How
2 do you do that? That that's the focus of the way
3 I'm using the term rating. It is not ultimately
4 what sort of paper you print it on or do you slap
5 it on a tire or anything of this sort. It's more
6 like, what is this concept anyway and how does it
7 work?

8 My point four here. I've heard the term
9 bins or categories and I think that's a common
10 thing. Is it A, B, C, D? A, B, C, D, E? A, B,
11 C, D, E, F, G, H or, you know, one star, two star,
12 three star? How many do you break this into, how
13 few do you break this into? Please. And I mean,
14 these are clearly areas that need some open
15 discussion and common understanding and maybe some
16 ideas on how can we do some testing of different
17 concepts here to get out ahead of this thing so
18 that we have a higher level of confidence of what
19 would work and what wouldn't, okay.

20 Part of this also has to do with the
21 fact that, well, we're reacting to data that we
22 have. So there is going to be a data limitation
23 here in some way that you'd say, well that can
24 only be divided up this way. Or the data is only
25 so finely accurate that if you make it any smaller

1 than that it is meaningful relative to the data.

2 So there's a lot of different concepts
3 here that I think are going to have to be taken
4 into consideration as a part of the discussion of
5 the rating system. But this one is wide open,
6 this one is wide open. I have yet to see a
7 concept yet that I'm saying, I think this is it.
8 So please, we're very, very interested in opening
9 a dialogue and getting ideas from everybody on
10 this one. Yes, Luke.

11 MR. TONACHEL: Luke Tonachel from NRDC.
12 I was just wondering. There seems to be that
13 there are people in the world that are sort of
14 expert at this typical, this topic. And I'm
15 wondering if there's either resources or people
16 have ideas of how to work with those people so
17 that we can pull in -- I imagine there's people
18 here at the Energy Commission through your other
19 appliance efficiency standards that have some of
20 this expertise. But whatever ideas there are in
21 terms of tapping that.

22 ADVISOR TEN HOPE: I had the same
23 thought to perhaps throw out. It seems like the
24 kinds of points that you put up there are
25 different categories. One is very technical in

1 terms of, what are the technical questions about
2 what the standards should be or how far to push
3 and what the testing protocols are.

4 And then you have two other sort of
5 characters. One is this label and/or not label.
6 The information and how it's conveyed. And I
7 think there's a lot to be learned from appliance
8 efficiency and, you know, other types of appliance
9 consumer information that has been provided on
10 efficiency. We heard some of it this morning and
11 there's just a whole body of knowledge in that
12 area.

13 And I would think an informational
14 workshop that brought that expertise together and
15 talked about how consumers perceive efficiency
16 information, what's most powerful, what's most
17 effective, would be -- it's a whole different
18 thing than what should the technical standards be.

19 And the third area I think is the
20 education from the dealer/consumer side. What's
21 going to be effective for that interaction between
22 dealers and consumers. And we don't much about --
23 I personally don't know much about what
24 information would be effective in a dealer's hand
25 in that conversation when a consumer is making a

1 purchasing decision. And that's a whole other
2 area of exploration.

3 So you might think about having your
4 workshops in those three different areas.

5 MR. TONACHEL: I think that your
6 categories are right on. And I guess part of my
7 question is, are there resources identified to
8 bring in those experts or do we know who they are?
9 Do we need to find out who they are? Are you
10 asking us to come up with those people? That's my
11 general question.

12 PRESIDING MEMBER BOYD: Well it sounds
13 to me like Ray is asking you the audience for some
14 suggestions in this area. As Laurie just
15 indicated, we have expertise in other areas, not
16 tires, but in this general arena that relates to
17 building and appliance efficiency. I know Ray has
18 actually talked to the staff there and there's
19 probably additional information that can be
20 derived from there.

21 Earlier in the day I was making notes
22 here, particularly when Alan was talking, knowing
23 some of his alliances, work alliances now about
24 what kind of consumer reaction surveys are there
25 other than those done by the manufacturers. I

1 know you all do it in order to know how to peddle
2 your product, so to speak.

3 But I am just wondering if there are any
4 other consumer -- well I know there are other
5 consumer behavior surveys that have been taken
6 that we could probably tap into to help design a
7 program of reaching out to the consumers. But you
8 the tire manufacturers are very skilled at
9 reaching out to the public and touching them for
10 selling them tires.

11 You probably have a lot you can
12 contribute with regard to suggestions of how to
13 pass on this new piece of educational material
14 that is the net result of all these efforts to get
15 in the hands of consumers as they make choices.
16 So I don't know if it's that big a problem.

17 I don't know if the information -- I'm
18 looking at Ray's slides now, whether they're way
19 over-reaching in terms of the amount of
20 information that is really needed. But it is, you
21 know, his effort at getting an idea of what might
22 be needed. I think I would put some of this as,
23 this is what we think we need to have as you think
24 about formulating the program. If you have other
25 thoughts please let us know. If you think some of

1 this is going off the deep end please let us know.

2 Or let Ray and the staff know.

3 I don't know if that helped any. I
4 guess, Ray, you ought to plod on through your
5 stuff because by the time you get done I think
6 everybody is going to feel very weighted down.
7 And then we have to sort through it all.

8 MR. TUVELL: I put myself late in the
9 day so I could speed through this.

10 The final slide that I have has to deal
11 with the question of verification and compliance.
12 And it has been touched on to some degree with
13 other speakers. Certainly when we get in the
14 business of talking about rating systems and data
15 gathering and making that information available to
16 the public, in essence the government is putting
17 its stamp on it and saying, you can trust this
18 information, okay.

19 And so that puts us into the position
20 now where we have to establish a mechanism where
21 we can do verification and compliance. So these
22 are the different concepts that we would be
23 proposing as a part of a program that deal with
24 that. So mechanisms whereby which manufacturers
25 would submit information to us.

1 The Energy Commission getting the
2 capability to do independent testing. And of
3 course, if we were to do that, that would be
4 through independent contractors for certain --

5 Then the ability to do random and
6 selected testing where we could just pull
7 something. You know, well we want to get some
8 data on this. We're not exactly sure what's going
9 on with that tire.

10 Or the challenge mechanism that has been
11 talked about earlier where either a consumer or
12 another manufacturer says, I don't know if I trust
13 this data that is being presented here. We would
14 like to challenge that in some way. So we then as
15 an independent entity can respond by getting tests
16 conducted in a fashion so that we can overcome any
17 differences of opinion there.

18 And of course when we talk about the
19 area of verification and compliance then I have a
20 number of questions again that I would like your
21 feedback and perspectives on. What should be the
22 steps of such a process?

23 Should there be steps where if something
24 were to come up we'd automatically get in contact
25 with a manufacturer and say, you need to know

1 something, your product is being challenged. Get
2 your data to us, prove it to us, something like
3 that. What steps should be in such a process for
4 verification and compliance?

5 If we get into a circumstance where in
6 fact as a result of some testing we find, hey
7 there is a problem here. This data isn't
8 consistent. What we're finding through our tests
9 is not consistent with what has been reported to
10 us. Then if that's the case then what should the
11 consequences be. It's not only the consequences
12 in terms of what process would we use now to get
13 things right but most certainly --

14 We want to get into a situation where we
15 don't find ourselves being overwhelmed by the
16 government's need to do verification and
17 compliance. In other words, where somebody would
18 say, what the heck, I'll just submit whatever
19 data. It's up to them. The government is never
20 going to catch up with me. There's 40,000 tires
21 out there. By the time they get around to testing
22 my tires, forget it, we'll be long gone.

23 Well, we don't want that to happen.
24 We'll never be able to keep up. And so do we have
25 to establish consequences right at the top and

1 say, hey look, make sure your data is good.
2 Because if we find a problem this could be a
3 consequence.

4 So give me your feedback on that. What
5 do you think we should be dealing with in that
6 area? Do we have something or not, what would be
7 effective. Can we redefine the problem instead of
8 saying, well there's a consequence, there's
9 another action. I mean, if there's other words
10 you would prefer to use that's fine with me too
11 but you get the point, okay.

12 And I think Luke mentioned this and it
13 is certainly a concern for us. We get in this
14 business there's going to be costs associated with
15 it and we're going to have to come to grips with
16 that. So I put this out there as, you know, it's
17 probably as much a question for us as it is for
18 you. And so there's a cost issue that we're all
19 going to have to come to grips with on running a
20 program like this and the continuation of a
21 program like this. None of this stuff is free.

22 So if you have any ideas on that or
23 again you're familiar with other precedents on
24 where this has been done before and how these
25 types of costs and stuff have been covered then

1 absolutely. Now that one, that's the last of my
2 slides.

3 Just let me sort of in summary say this.
4 This is the opening of the dialogue. These are
5 the first times we've had an opportunity to raise
6 these questions, to get this public dialogue
7 going, okay. This is the first, will be the first
8 in a series of workshops, working groups, whatever
9 it takes for us to get a clear definition of all
10 the outstanding issues.

11 And setting up mechanisms where we can
12 get it refined to the greatest extent possible, to
13 come to concurrence on where we can, to come to
14 consensus where we can. Or where we can't agree,
15 a clear definition of what that is. So we can
16 provide that information to the decision-makers as
17 soon as we can possibly do that and get this
18 information out there in a form where it needs to
19 be out there in the marketplace and effectively
20 participating in tire purchase decisions. That's
21 where it needs to be.

22 And our charge is to come up with a
23 program to do that. And the way this is going to
24 succeed is with the active participation of
25 everybody in this room and most certainly the

1 industry participants.

2 PRESIDING MEMBER BOYD: Would you like
3 to react at all, Tracey?

4 MS. NORBERG: Well certainly we'll be
5 active participants, I can promise you that. I
6 guess overall, you know, just to sort of echo what
7 I had shared during my presentation.

8 We would really advocate at this point
9 that the Commission take a good, you know, a look
10 at the statute itself and look at the order of
11 things that are set out in the statute. Really
12 looking at, you know, selecting that test method,
13 getting the database done. Then do the rating
14 system and then do reporting requirements. And I
15 think the statutory language is pretty clear in
16 terms of how to proceed with that approach.

17 I think it is very difficult when we're
18 looking at, gosh, what would reporting look like
19 when we don't know what the program is and vice
20 versa. And I think that's why the statute is
21 designed that way. It's really to take it in a
22 stepwise fashion and say, you know, we need a test
23 method, then we need data, then we need a rating
24 system and then we need to figure out compliance.

25 So I guess overall it would be our

1 message to say, let's do it in that order. That
2 makes sense, it's logical. And, you know, we're
3 here to participate.

4 PRESIDING MEMBER BOYD: Okay, anybody
5 else like to make any comments?

6 As I sat and listened to this I realized
7 Ray put out everything on the table that one would
8 think about as one was designing the entire
9 overall program.

10 So I don't, I'm trusting we don't really
11 intend to require the folks to respond by the 21st
12 of December to all that just came out the door. I
13 guess anything you might want to comment on, fine.
14 But I think a little bit more in that time frame
15 is just kind of what the general, overall theme of
16 what we were trying to get at today would be
17 appropriate.

18 I can't even in my mind draw a dividing
19 line as to how far you need to go and how far you
20 don't, you wouldn't have to go based on what I
21 just said. So I'd say do the best you can by the
22 21st. Roughly frame some issues.

23 And from what I heard from Ray, a lot of
24 this is going to have to be what is talked about
25 as we move along. As he and the staff here think

1 about what they heard today and how they might
2 distill things down as to what is really needed
3 and what's not, and put it in the sequence of a
4 logical order to proceed. And I must confess, the
5 law does lay out an order that may prove to be the
6 logical order in which to proceed.

7 We have to do it all by regulation, even
8 -- I don't know if Caryn is still back there. I
9 can't see her. Whether she bailed out a moment
10 ago. She was there. But even as I understand it
11 the test procedure we have to do, we have to
12 choose -- We have to choose a test procedure in a
13 regulatory way. So we have to grind that through
14 even. And maybe we're ready to start that one and
15 to get it on its way.

16 I would just like to acknowledge that I
17 recognize in the audience some members of the
18 Integrated Waste Management Board. They are
19 referenced in the law as having a role here on
20 this project and process, particularly as it
21 relates to their specific responsibilities for
22 managing waste in the state.

23 And tires are deemed a very unique and
24 novel waste item in this state. Always a problem
25 to all of us. I know the staff will be working

1 with them more in the future on this issue. And I
2 must acknowledge that they helped pay for the
3 Smithers study so they're stakeholders and they
4 have an investment in this process.

5 Ray, anything else? Luke? And anything
6 else anyone else has to say. Because I'm a little
7 overwhelmed myself so I won't have a lot more to
8 say.

9 MR. TONACHEL: Luke Tonachel from NRDC.
10 Just going back to one of your opening comments,
11 Commissioner Boyd. In terms of people get what
12 they can to you by the 21st. I wondered if you
13 could maybe give us a sense of, the staff is going
14 to absorb that information and then -- and maybe
15 what some people should be submitting are ideas
16 for which working groups are necessary.

17 And then I wanted to get an idea of when
18 maybe we would know when the next meeting would be
19 scheduled and probably the topic of that meeting.
20 If it's going to be a working group meeting on the
21 test procedure or whatever it is. That would be
22 helpful to know when we're going to find that out
23 and start getting the right people together, that
24 sort of thing.

25 PRESIDING MEMBER BOYD: A good point. I

1 think one of the questions Ray put forward is what
2 areas do you think are going to be difficult
3 versus what areas appear to be very easy. I'm
4 walking away from this thinking that the test
5 procedure area is fairly well reconciled. Maybe
6 some folks need to get together one more time to
7 wrap that up but I think the point is well taken.

8 What I said at the beginning and what
9 I'm feeling now is I'd like to see the staff
10 digest what they heard today and develop some kind
11 of sequential time table for dealing with the
12 issues that need to be dealt with to complete this
13 process and this project. And I think that would
14 then need to be shared with you all.

15 And in the process of formulating those
16 ideas perhaps the staff -- and perhaps with the
17 benefit of what you turn in on the 21st, whatever
18 that might be, can break it into the categories
19 where there may well have to be a gathering of
20 folks in the form of a working group or a formal/
21 informal workshop, or just working group
22 discussions on various issues.

23 I don't think it's appropriate to have
24 too many workshops like this on lots of small
25 points that need to be resolved, that can't be

1 resolved just through interface of all the
2 stakeholders in informal meetings.

3 You look poised to want to say
4 something.

5 MS. NORBERG: Thank you, Commissioner
6 Boyd. I guess what my thoughts, if I could be so
7 bold. In terms of what we might be able to get to
8 all of you by the 21st are some overall
9 perspectives. Maybe some that we shared today and
10 maybe some beyond that, on how the process should
11 proceed and how we view it.

12 You know, in terms of formal, working
13 groups versus workshop topics. My initial
14 thinking is that maybe it's more right for
15 workshop topics.

16 I think in my experience on this issue
17 and many others in the tire industry, it tends to
18 be when we try to do working groups it ends up
19 looking suspiciously populated, like every other
20 working group. Because of staffing, you know,
21 it's pretty much the same people that show up I
22 guess is what I'm saying. So topics might be the
23 more salient point because we might need to just
24 bring in additional expertise. But the core group
25 I'm guessing is probably pretty similar to

1 everyone who came today.

2 PRESIDING MEMBER BOYD: I think the core
3 group is sitting in this room.

4 MS. NORBERG: Yes. I guess, you know,
5 we'll always be here.

6 PRESIDING MEMBER BOYD: And I tend to
7 agree with you about the idea of creating separate
8 working groups versus just identifying the topics
9 that need to be addressed and any and all can have
10 at them in any meeting that's called to discuss
11 them. They don't have to be nor will they be
12 formally called workshops like this. I'd
13 certainly agree with that. Okay.

14 ADVISOR TEN HOPE: Commissioner, I just
15 -- You want to close.

16 PRESIDING MEMBER BOYD: No, no, go
17 ahead.

18 ADVISOR TEN HOPE: My sense is when we
19 went into this that we were thinking that all
20 these topics would be discussed and have some
21 general sense of the scope of all of these
22 questions and then begin rulemaking.

23 And what I hear proposed is that we're
24 really close on the test protocol and the database
25 and we could start the regulations on those, and

1 then move into the other topics. Am I hearing
2 that correctly?

3 MS. NORBERG: You know --

4 ADVISOR TEN HOPE: That you really want
5 to chunk this in terms of that phase, put that to
6 bed, next phase.

7 MS. NORBERG: To be honest, you know,
8 I'm not sure of the utility of having a separate
9 regulation on the test protocol other than that it
10 becomes part of the, you know, the basis for the
11 regulation on the rating system and the compliance
12 mechanism. That's just my perspective. I'm not
13 sure what it would gain us to have, you know, a
14 formal regulation with the test method ahead of
15 the schedule.

16 And the database, my sense in reading
17 the legislation is that it is a tool to use in
18 order to create the rating system. It's not, you
19 know, it's not an end product in and of itself.

20 PRESIDING MEMBER BOYD: Yes, we have
21 struggled with that. We thought we were going to
22 have to work our way around that provision in the
23 legislation. It is not an entity in the same form
24 as the other issues that are listed in the law.

25 We were discussing this earlier this

1 week on how to just fold that in somehow or
2 another and comply with the intent of the
3 legislation but still recognize it's not -- you
4 don't put a database in a regulation so to speak.

5 MS. NORBERG: I mean, the way I read the
6 law it's really just telling you, they're telling
7 you what the sufficiency of data might be in order
8 to create the rating system, versus it being a
9 regulatory requirement, you know, that would
10 manifest itself in regulations.

11 PRESIDING MEMBER BOYD: Anyone else have
12 any other comments, thoughts? Ray, anything more
13 you're cogitating on? All that you've heard.

14 MR. TUVELL: Nothing else from me. A
15 lot of work ahead.

16 PRESIDING MEMBER BOYD: Okay, I will
17 thank everybody. Thank you for being here on a
18 Friday. I know it inconveniences lots of folks,
19 especially those of you who have to go east. It's
20 already late in the east. Enjoy your night in
21 Sacramento if you're presuming to say.

22 We look forward to seeing you in the
23 future. Not too many times, but seeing you in the
24 future on this subject. And hopefully we've
25 launched this now on its last, the last sailing

1 trip for this project.

2 Luke, you were in the Navy. What kind
3 of naval analogy should I be making?

4 Thank you everybody.

5 MR. TONACHEL: Let's just say we're not
6 trying to turn a tanker, we're in a speedboat at
7 this point.

8 PRESIDING MEMBER BOYD: All right. And
9 no more glacial alacrity.

10 Thank you everybody, good night.

11 (Whereupon, at 3:30 p.m., the Committee
12 Workshop was adjourned.)

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CERTIFICATE OF REPORTER

I, JOHN COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Committee Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 17th day of December, 2007.

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